1942.

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QUEENSLAND.

ANNUAL REPORT

OF THE

DEPARTMENT OF AGRICULTURE AND STOCK

FOR

THE YEAR 1941-42.

PRESENTED TO PARLIAMENT BY COMMAND.

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REPORT OF THE DEPARTMENT OF AGRICULTURE AND STOCK FOR THE YEAR 1941-42.

TO THE HONOURABLE THE SECRETARY FOR AGRICULTURE AND STOCK.

SIR,—I have the honour to present herewith the Annual Report of the Department for the year ended 30th June, 1942.

SEASONAL CONDITIONS.

Midwinter rains ensured a sufficiency of soil moisture for early crop establishment, but this advantage was offset by an unusually dry period, which continued almost from July until January. The wet season proper was delayed until February—a month of very heavy rainfall over most of the State. Serious flooding occurred in the Burnett Basin and in parts of the Darling Downs. Since then moderate, regular rains have ensured good seasonal conditions, especially in the agricultural districts. In the north-western pastoral regions, however, the year generally was very dry. The present winter is the mildest for many years.

THE PASTORAL INDUSTRY.

The following preliminary figures compiled by the Government Statistician reveal the livestock statistical position as on 1st January, 1942:—

Stock.	Estimate 1st January, 1942.	Actual Numbers 1st January, 1941.
Sheep	25,500,000	24,000,000
Cattle	6,400,000	6,300,000
Horses	460,000	445,000
Pigs	380,000	450,000

Values for all classes of livestock increased.

Fat sheep, fat lambs especially, continued in strong demand throughout the State.

A ready market for all classes of livestock and pastoral products is in prospect. Economically, graziers generally may regard the immediate future with confidence.

Investigation and control work, although on a somewhat restricted scale because of Army veterinary staff requirements, has been effective in the detection, prevention, treatment, and control of a wide variety of diseases among all classes of domestic animals.

Wool production aggregated 654,981 bales, of which 627,765 bales were subject to appraisal, leaving a carry-over of 27,216 bales. The total exceeded that of the previous year by 27,729 bales.

VETERINARY SERVICES.

The general animal health situation within the State remained normal, apart from an extension of buffalo fly infestation and the occurrence of stickfast flea on poultry; in each case, appropriate and prompt measures of control were applied with considerable success.

In respect of the buffalo fly, restrictive action included the control of organised movements of infested stock, and the installation of spraying outfits at railheads. As a result, the parasite was kept out of the main fattening country on the eastern coast, and also the coastal dairying districts. At the end of June, 1941, the fly had migrated to the Mitchell River, on the west coast of the Cape York Peninsula, and at the end of June this year it had reached the east coast near Cooktown. No completely successful methods of controlling the natural spread of the pest are, as yet, available.

A progressive innovation was the institution of a series of demonstration schools in respect of preventive and remedial treatment for parasites in sheep in the main pastoral centres. These schools, through which the knowledge gained by officers who had undergone special refresher courses were brought directly to pastoralists and others interested in this branch of animal husbandry, were a pronounced success.

The Poison Plants Committee continued its chemical investigations and feeding trials of plants suspected of being poisonous to stock, and achieved some noteworthy results, which are recorded herein.

The activities of the Animal Health Stations in the preparation and distribution of vaccines and other specifics for the prevention and treatment of stock diseases covered a wide range of service throughout the year.

AGRICULTURE.

Winter crops were affected adversely by dry conditions, which also restricted general summer plantings until the occurrence of widely-distributed rains in January and February. The summer rains caused serious floods in the Burnett Basin and portions of the Darling Downs.

Sugar.—In addition to its importance as a food, sugar is now a most important raw material for munitions production, and progressively larger quantities are being used for this purpose.

The sugar output for the 1941 season of 697,345 tons, manufactured from 4,793,589 tons of cane, was 62,000 tons below the yield of the previous year. This reduction was due, in part, to unfavourable seasonal conditions. Because of the decision of the Government to acquire only that sugar within the peak quota for each mill, a substantial amount of cane remained unharvested. Difficulties in transporting the crop and the delivery of marketable surplus overseas caused accumulations of raw sugar at the mills; but, despite all obstacles, it was possible to make a very commendable clearance in advance of the 1942 harvest, and the position is now relieved. In view of all these circumstances the average price paid per ton of raw sugar—£17 6s. 3d., as compared with £17 2s. 6d. for the 1940 output—was satisfactory, and was the highest since 1932.

The preliminary estimate for the 1942 harvest indicates a further decline in production, which is not expected to exceed 650,000 tons, while the manufacture of this quantity is contingent upon a number of factors which may prevent the crop from being fully harvested. It was necessary to store much of the 1941 raw sugar at the mills and North Queensland ports while awaiting shipping facilities.

Wheat.—Despite adverse conditions, wheat sown on fallowed land on the Darling Downs yielded approximately 2½ million bushels. Many crops had less than an inch of rain during the growing period. The seven chief Queensland wheats, in order of acreage harvested, were bred and introduced into general cultivation by the Department of Agriculture, and, with other Queensland-bred wheats, now comprise 80 per cent. of the total acreage planted.

Maize and Sorghums.—Some large yields were obtained from late maize and sorghum, but because of the delayed summer rainfall the aggregate yield of most of the principal field crops was under average. As early frosts did not occur on the Darling Downs, grain sorghums matured and produced some very satisfactory crops. The Atherton maize crop is estimated at from 12,000 to 14,000 tons.

Fodder Crops.—Summer fodder crops—including maize, sorghum, and sudan grass—made abundant growth after the summer rains, and, in addition to fulfilling seasonal requirements, provided a reserve for conservation.

A modified experimental programme, involving wheat, sorghums, maize, and fodder crop trials, was satisfactorily concluded.

Cotton.—Adverse climatic conditions during the later months of the previous cotton season continued almost unbroken during the first half of the present season. The area of cotton planted was thus reduced to roughly 50,000 acres, although sufficient seed was supplied to plant fully 73,000 acres. It is estimated that the final cotton yield will approximate the 11,437 bales produced in the previous crop.

Some outstanding yields have been obtained from some irrigated areas in the main cotton-growing districts, and results indicate clearly the value of this system of cotton-growing. Yields resulting from the practice of the most advanced methods of cotton-growing under dry-farming conditions have again indicated that the difficulties associated with this system are being successfully overcome.

Tobacco.—Tobacco yields in the main northern and south-west districts were satisfactory, both in quantity and quality. The present crop estimate of 2,535,900 lb. is higher than the weight of leaf actually harvested (2,281,968 lb.) in the previous season.

Peanuts.—The season in the South Burnett was unfavourable for high peanut yields, which were much below pre-harvest estimates. The quality of the crop also was affected by the weather conditions. The aggregate yield was just above 5,000 tons. In the Rockhampton district, the estimated yield was 250 tons; and in the Atherton district the yield—90 tons—was under average.

Potatoes.—The response to an appeal to growers in the northern agricultural districts to produce potatoes under contract to the Commonwealth Department of Supply and Development exceeded expectations. In the southern producing areas, where the spring was unusually dry, potato yields were below normal.

Soil Conservation.—Because of the engagement of many officers of the Department in other fields of national service, soil conservation work had to be temporarily suspended; and for the same reason, field work generally, apart from the requirements of priority crop production, had to be curtailed.

FRUIT.

In the coastal districts, notwithstanding lower yields, orchardists have experienced one of the most successful seasons for many years.

There was an almost complete freedom from fruit-fly in places where the pest is usually prevalent, and practically the whole of the deciduous fruit crop was marketed without loss.

To ensure supplies of fresh vegetables for the fighting forces, as well as for the people generally, a special drive to increase production was undertaken, and contracts were arranged, on behalf of the Commonwealth Government, with growers for vegetables at guaranteed prices.

PLANT INDUSTRY (RESEARCH).

The work of the Division of Plant Industry (Research) has proceeded somewhat along the lines adopted during the previous departmental year. Still further modifications in its programme, however, have been dictated by the prevailing abnormal conditions—e.g., the pasture investigational work, which consisted largely of long-range projects, has been drastically curtailed to permit of greater attention being paid to problems of more immediate importance.

Short-term investigations of the nutritional requirements of the commoner vegetables have already yielded results of immediate value to the growers of these important crops, and a considerable amount of progress has been made in the investigation of pests and diseases, the incidence of which hampers the production of these crops under the tropical and subtropical conditions prevailing in Queensland.

Cotton has again received much attention from officers of the Division, and work on this crop included the investigation of plant-breeding, soils, irrigation, and entomological problems which have arisen in the course of the expansion of cotton-growing in this State.

Stored products pests have also been featured in the Division's programme, particular attention having been paid to the insect enemies of flour, wheat, and peanuts.

THE DAIRY INDUSTRY.

Because of seasonal conditions and labour shortage, butter production was about 20 per cent. lower than in the preceding year. The quality of both butter and cheese was, however, maintained.

A satisfactory sequel to a campaign pursued vigorously in the past few years has been the raising of the quality of Queensland cheese to a higher level than has ever previously been attained. This improvement was particularly opportune in view of the campaign for increased cheese production to supply an expanding national need.

A major research investigation, brought to a successful conclusion through the collaboration of Commonwealth and State Departments and with the assistance of the Queensland Butter Board, has facilitated the conversion of inferior butter to pure butter-fat, in which form it can be transported as unrefrigerated cargo. A market for the disposal of all inferior butter in this form has been developed, and a processing plant has been established in Brisbane.

PIG RAISING.

In the pig industry, sound progress in breed and type improvement, and also in the improvement of marketing facilities, was made in the course of the year.

Expansion in the curing and canning branches of the industry is reported. Consumer demand has largely increased, and this has led to an improvement in the price position. The demand for better-quality breeding stock has also strengthened. Pig raisers have co-operated wholeheartedly with the Department in the maintenance of production in respect to both volume and quality.

POULTRY.

Producers supplied the largest number of eggs ever received in one year by the Queensland Egg Board, exceeding the supply of the previous year by 13 per cent. Expansion of the industry was general throughout the State.

WILD LIFE PRESERVATION.

Observance of the provisions of *Native Fauna Protection Act* and the *Native Plants Protection Act* was ensured by a system of regular patrols by both staff and honorary rangers. Additional sanctuaries for the preservation of wild life have been proclaimed.

CHEMISTRY SERVICES.

War conditions intensified the demand on the services of the Agricultural Chemist and his staff, to which obviously only brief reference can be made.

The interests of primary producers as purchasers of seeds for sowing, fertilizers, veterinary medicines, pest destroyers, and stock foods continued to be served by the Department, which is ever vigilant in its administration in these as well as in all other matters covered by its legislative authority.

DEPARTMENTAL PUBLICATIONS.

An extensive informational service by means of departmental publications, regular Press contributions, radio broadcasting, and lectures was maintained throughout the year. With its December issue *The Queensland Agricultural Journal*, which was established in 1897 and had thus entered on its forty-fifth year, was suspended for the duration of the war. At the time of its suspension the aggregate annual distribution of the *Journal* approximated 112,000 copies. *The Weekly News Bulletin*, now in its seventh year, continued to supply a regular Press service to every newspaper in the State.

A notable addition to *The Queensland Agricultural and Pastoral Handbook* series, published in the course of the year, was the volume *Farm Crops and Pastures*.

The Photographic Section and the Central Library service also had a busy year.

MARKETING.

Wartime conditions have transformed the position regarding the marketing of many primary products, and have caused a divergence from the pre-war problem of finding satisfactory markets for surplus production to one of meeting the needs of both the armed forces and the civil population.

The several organisations established over a long period under the marketing legislation of Queensland have enabled primary industry to maintain its stability while undertaking major adjustments. Where the Commonwealth Government has found it necessary to introduce measures to acquire crops, arrange for distribution of supplies and equalisation of prices, these organisations have provided a means of administering the control plans in an orderly and economical way not practicable in States where such organisations do not exist.

The soundness of a far-sighted departmental policy which has been directed to the development of an efficient system of marketing primary products on a commodity basis has thus been demonstrated in a remarkable way under war conditions. In co-operation with the Commonwealth authorities, State marketing boards have taken an effective part in the administration of schemes of commodity control set up under *The National Security Act*.

The existence of a marketing system so readily adaptable to war emergency has proved of immense benefit not only to primary producers, but to the people generally.

EMERGENCY FOOD SUPPLY.

The emergency food supply scheme set up in accordance with *The National Security (Emergency Supplies) Rules* and operated under delegated authority from the Commonwealth by the Queensland Emergency Supplies Committee under the direction of the Secretary for Agriculture and Stock has been very successful, and large reserve stocks of foodstuffs have been established in Queensland. The success of the scheme is due in part to the practical and willing co-operation of merchants and retailers, who have thus rendered good service to the State. A departmental advisory committee has also assisted materially in the preparation of plans for the control and maintenance under emergency conditions of supplies of perishable as well as non-perishable, essential foodstuffs.

WAR SERVICE.

Very many officers of the Department are now on war service at home and abroad with the Navy, the Army, the Air Force and women's auxiliaries.

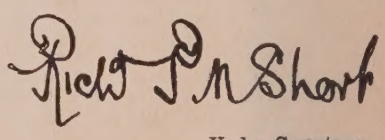
The deaths while on operational flights with the Royal Australian Air Force of two promising young officers—Sergeant Pilot R. Walsh and Sergeant Observer H. Grimes (death presumed)—are recorded with deep regret.

ANNEXURES.

Detailed accounts of the work of the Department during the year are contained in the report of the Director of Plant Industry (Research); the Director of Agriculture; the Director of the Bureau of Tropical Agriculture; the Director of Cotton Culture; the Director of Fruit Culture; the Director of Veterinary Services; the Chief Inspector of Stock; the Director of Dairying; the Senior Instructor in Sheep and Wool; the Poultry Expert; the Registrar of Brands, and of the Veterinary Surgeons Board; the Agricultural Chemist; the Officer in Charge of Seeds, Fertilizers, Veterinary Medicines, Pest Destroyers, and Stock Foods Investigation Branch; the Editor of Publications; the Director of Marketing; the Registrar of Co-operative Associations; and the Secretary of the Emergency Food Supply Organisation—all of which are incorporated herein.

I am, Sir,

Yours faithfully,



Under Secretary.

REPORT OF THE DIRECTOR OF PLANT INDUSTRY (RESEARCH)

The past twelve months witnessed a marked change in the extent and in the nature of the programme of investigational work of the Division of Plant Industry (Research). Nineteen of the Division's staff of forty-seven officers were absent on military service, or in munitions factories, and this reduction in staff necessitated a curtailment of the programme under way when last year's report was submitted. An endeavour, however, has been made to maintain such of its essential features as are likely to be productive of early results, and work has been intensified on crops of particular and immediate importance. For instance, a steadily increasing amount of attention has been given to various aspects of vegetable production, and work on cotton occupied an even more prominent position in the Division's activities than was formerly the case. Te reorientated investigational programme of the Division is reviewed in the following paragraphs. When perusing them it is well to bear in mind the fact that, in addition to working on this programme, officers of the Division handled a very large and growing volume of advisory work on plant nutritional, entomological, plant pathological, botanical, soils, beekeeping, and other problems.

Agricultural Plant Breeding.

Cotton was once more the crop to which most attention was paid in the agricultural plant breeding programme and, in spite of rather adverse seasonal conditions, reasonably good progress has been made in the case of this crop.

Although the main breeding area of Oklahoma Triumph was practically destroyed by serious flooding in February, satisfactory progress was achieved in the attempt to obtain superior strains of this variety, which is one of the most promising of the quick-maturing cottons grown in Queensland.

Work was also continued on Lone Star, but adverse conditions precluded the planting of the main rain-grown area on which it was intended to test strains developed to withstand dry conditions. However, an irrigated area of new selections yielded a particularly promising strain which seems to be well worthy of a test as a rain-grown crop. Stoneville was another variety, the improvement of which was featured during the year under review, the work being carried out in the Upper Burnett.

Improvement work in New Mexico Acala, which may become a leading variety for the production of inch or longer staple in the drier districts, was also continued on irrigation areas in the Callide Valley and on rain-grown areas in the South Burnett, and some very promising material was obtained at the former centre during the 1941-42 season.

Much interest again centred in the breeding work on the Miller variety, partly because it is the most extensively grown cotton in this State, and partly because of the important role it is playing in the work of evolving a jassid-resistant cotton. Substantial progress was made in the ordinary breeding work in Miller, and its most advanced new strain is being released in the coming season for commercial increase in the Callide and in the Upper and South Burnett. Several very promising newer strains were also obtained in the main breeding area.

Satisfactory progress has been achieved in the task of evolving a jassid-resistant strain of the Miller variety, as is shown by the fact that forty-nine out of one hundred Miller strains, planted in a jassid-infested area, gave promise of being jassid-resistant, and of producing a suitable type of fibre. Some one hundred and fifty superior and apparently jassid-resistant reselections were made from these forty-nine strains for further testing. A bulk selection of Miller plants, which displayed some degree of resistance to jassid attack, was made in the 1940-41 season, and grown in jassid-infested country in 1941-42; the results obtained indicate that some degree of resistance has been achieved. The seed from this multiplication block will accordingly be released for commercial testing in jassid-susceptible areas in the Callide. The jassid-resistance breeding work is not confined to the selection of Miller strains, for the problem is also being tackled by hybridizing the Miller variety with jassid-resistant cottons, and here again there is some prospect of eventual success.

Once again abnormally dry conditions militated against the incidence of rust, and it was therefore impracticable to make substantial progress in developing rust-resistant wheats. At the Research Station at Biloela, however, rust infection was artificially produced, thus permitting a rough estimate of the degree of rust-resistance in a large amount of material, and a subsequent selection of such of that material as showed most promise. Some attention was given to the purification of certain of the leading Queensland-bred wheats, and sufficient seed was obtained of these varieties for planting multiplication plots in 1942. It is of interest to note at this stage that the seven leading varieties of wheat in the 1941 harvest were Queensland-bred, and that Queensland wheats represented practically 80 per cent. of the acreage sown.

The prevailing dry conditions adversely affected the barley-breeding work, and, therefore, no progress can be recorded in this project. The position with respect to oats, however, was somewhat happier, and several desirable types have been obtained, in which both some degree of resistance to rust and earliness may be characteristics.

The maize-breeding programme on the Atherton Tableland is one of the projects which, by force of circumstances, have been temporarily abandoned, and all seed stocks connected with it have been transferred to Biloela for storage. Small-scale sowings of the regenerated stock of Durum and Atherton Dent maize were made at this centre in order to obtain seed increases. A small plot of sweet corn, U.S. D.A. 34, was also planted at Biloela for testing. This variety proved satisfactory in the experiment, and was both tall and vigorous in growth. A reasonable quantity of seed was obtained for further field tests.

The necessity for concentrating on cotton investigational work lead to a reduction in the amount of time devoted to the sorghum-breeding programme. It was possible, however, to carry out a varietal trial in the Callide of the leading grain sorghums, and of the saccharine sorghums showing most promise for this district; an observational plot of eighty-nine varieties covering a wide range of grain and saccharine sorghum varieties, some of which may prove to be of value in this State, was also laid down. Ajax, Kalo, and Heguri gave the best results in the grain sorghum varietal trial, while Sugar Drip, White African, Dwarf Ashburn, and Jones were the saccharine varieties giving the best yields. A comprehensive series of notes was made in the sorghum-breeding plot, and a number of heads of each strain were hooded for seed production. Pure seed of some selections was also obtained for further testing. A few crosses were made between the open-panicled Shallu and three dwarf varieties with the object of producing an open-panicled dwarf strain.

Horticultural Plant Breeding.

The pineapple plant selection programme and the various observational plots comprised therein were maintained during the year under review, but this project, of necessity, has received less attention than was previously the case. Observational work on the papaw progenies was also carried out as in the previous year, but no additional strains were produced. Five new strawberry varieties, received from the United States Department of Agriculture, were established at Nambour, where they will be maintained until circumstances permit of their being comprehensively tested and used in plant-breeding activities. Some progress was made in the programme for evolving disease-resistant varieties of tomatoes, but, here again, the work must be on a reduced scale until the return of more normal conditions.

Pasture Investigations.

The pasture investigational programme, initiated a few years ago, consisted, in general, of long-range projects in which conclusive results were unlikely to be obtained at an early date. This programme was therefore virtually suspended in December.

In last year's report mention was made of the fact that the rested areas in the Dayboro' blue couch pasture improvement experiment had benefited by freedom from grazing, there being a response to the favourable conditions then prevailing. These rested areas, however, showed the effect of a recurrence of adverse climatic conditions, and these were so severe that all previously established legumes in the experimental area in this district died out. The paspalum pasture renovation experiment at Cooroy was also seriously affected and, towards the end of the very prolonged dry period, even the superphosphate-treated plots, which hitherto had remained green, though unproductive, dried up.

Despite the lack of rain, the pasture contour furrows in the experiments at Eumundi, North Arm, Maleny, and Waterford carried some green grass throughout the long dry period. Apparently the penetration and accumulation of the good rains in March of last year contributed to this growth, and it is unfortunate that adequate replenishment of moisture did not occur earlier in this season to demonstrate more fully the value of pasture-furrowing.

The pasture legume species experiment at Dayboro' succumbed to the climatic conditions, the two white clovers, which had survived for two years, being the last of the species to disappear. Very few of the fourteen legumes sown at Mount Pleasant, Eumundi, and Waterford in 1941 became satisfactorily established. At the first-mentioned centre, Tallarook and Dwaalganup subterranean clover produced seed, and English trefoil also grew fairly well. The legume plots at Eumundi were located on soil which is rather retentive of moisture, and, as a result, the legumes grew reasonably well for several months, but the dry conditions eventually thinned them out. The results obtained at Waterford were

the poorest of the series, there being a total failure at that centre. The Townsville lucerne, which had been established in contour furrows at Eumundi, Maleny, and Waterford, failed to set seed, and eventually died out.

The pot experiment on type, form, and placement of phosphatic fertilizers for application to white clover on Cooroy yellow clay yielded some quite useful information. Another pot experiment, using the same class of soil, dealt with the retention of phosphate and potash, and was also informative.

Mention was made in last year's report of an experiment at Biloela with Rhodes grass, in which strips 5 feet wide, separated by cultivated strips 4 feet wide, were compared with broadcast sowings of the grass. This experiment was established on newly broken-up grassland, and on land on which three crops of cotton had been grown following on the breaking-up of grassland. The experiment was in its fourth year last season, and then the areas which had been under cotton for three years gave higher yields of both green and dry material than those which had been grassland immediately prior to the sowing of the Rhodes grass. The strips of Rhodes grass also gave better yields than the grass sown on the broadcast areas. Similar results were obtained in 1940-41, but, in the two earlier years of the experiment, the broadcasted areas yielded as well as, or better than, the strip areas; the areas which followed cotton, however, whether sown broadcast or in strips, outyielded those on which Rhodes grass was sown immediately after the breaking-up of grassland. There is, therefore, evidence that where a heavy-producing grass such as Rhodes is sown broadcast in a pure stand, there is an annual decline in productivity which, however, may be largely prevented by the strip system of sowing.

The testing of the Rhodes grass strains, supplied by the Council for Scientific and Industrial Research, was continued at Biloela, and once more the late-maturing Kenya strain outyielded the other three strains included in the experiment.

Cotton Investigations.

Plant-breeding work in cotton has already been dealt with in earlier paragraphs, and cotton pests will be discussed in the survey of entomological work; soil problems in this crop will also be referred to in later paragraphs. Hence the only cotton work which need be mentioned at this juncture is the set of experiments on irrigated cotton with which the Division was associated on the Burdekin Delta during 1941. Following on these experiments, a large-scale planting of irrigated cotton took place on the Delta in 1942, but this work constituted a special project not within the sphere of the Division, and doubtless will be reported on elsewhere.

Fruit Investigations.

The reduction in staff and the necessity for concentrating on short-range projects led to a marked decline in the amount of attention devoted to fruit problems. This work has been reduced to an absolute minimum, and virtually all that has been done is to ensure the maintenance of experimental blocks in such a condition that work previously carried out on them will not be wholly lost, and will be capable of resumption when more normal times return. This is the position on most of the banana, apple, citrus, pineapple, papaw, and strawberry experimental blocks.

The large-scale pineapple fertility trial at Glasshouse Mountains was closed down, but not before it had produced much useful information and had nearly reached the end of the cycle for which it was established. Work on the crookneck experimental plots in the Elimbah district was also terminated, but only after a reasonably satisfactory solution to the problem had been obtained.

In the case of the papaw, there was something more than the mere maintenance of the existing experimental blocks and the collection of data on the crops as they matured thereon. Actually, in this crop, there was quite an amount of additional work, carried out in co-operation with the Council for Scientific and Industrial Research, on the collection and testing of papain. A considerable number of samples of this important medicinal material were collected and given initial treatment at Nambour, before being despatched for testing by officers of the Council. These officers reported that the samples submitted showed consistently satisfactory characteristics.

Work on the hen and chicken condition, which is of such frequent occurrence in the Waltham Cross grape at Stanthorpe, was advanced a stage further in a co-operative experiment with the Fruit Branch. The results obtained indicate that borax, applied to the soil, or to the vine in the form of a spray, was, in all cases, effective in controlling the trouble, although no treatment actually eliminated it.

Cover Crops.

The work on cover crops was continued in the Maroochy district, and the results obtained show that further and larger-scale experiments are warranted with *Canavalia ensiformis, Crotalaria usaramoensis, Cajanus indicus,* and *Soya maxima* var. *biloxi.*

Essential Drug Plants.

The work on essential drug plants, carried on at Nambour and West Woombye, in association with the Council for Scientific and Industrial Research, was maintained on a satisfactory basis. Seedlings of *Cinchona,* from which quinine is obtained, were planted in the field, and further material of *Strychnos nuxvomica, Erythroxylon coca,* and *Strophanthus* sp.—sources of strychnine, cocaine, and strophanthin respectively—was handled. An area of an acre is now ready for the seedlings at present being maintained at Nambour. Observational work was undertaken on the native tree, *Duboisia myoporoides,* from which hyoscine is obtained.

Vegetable Investigations.

The nutritional requirements of beans were again the subject of investigation in a series of experiments with different levels of the main fertilizers, the field work being carried out at Buderim, Cooroy, and Stanthorpe. This investigation is yielding valuable information, one of the most important points established to date being the fact that the amount of potash that can be employed with profit, at least in most of the areas used for the production of beans, is very small. Indeed, the figures so far obtained suggest that the application of even one hundredweight of potash per acre may appreciably reduce the yield of beans. The nitrogen requirements of this crop have also been fairly well established, and it is hoped that on the completion of the 1942 bean experimental programme the position with respect to superphosphate will have been clarified. Bean varietal studies are now under way, and, among other things, it is hoped that much needed information will be obtained with respect to the canning possibilities of the more important varieties.

The work on boron deficiency in beetroot, which is an important adverse factor in beetroot production, has been continued in a further series of experiments, and so far these suggest that there may be a close interdependence between calcium and boron utilisation by beetroot, and indeed by other plants.

Unsatisfactory conditions in cauliflower crops in the vicinity of Brisbane manifested themselves in symptoms such as failure to head, reduction in the size of the head and inferior quality thereof, particularly as a result of discolouration. The evidence to date suggests a minor element deficiency as the cause of the trouble; nevertheless, preliminary experiments with magnesium, manganese, and boron have not been productive of definite results. Further experiments, at present under way, were designed to give information regarding the interrelationship of some of these minor elements in the soil, and also between them and calcium.

Lettuce is another vegetable crop which experienced considerable trouble during the winter of 1942, and here again the evidence indicates that unsuitable nutritional conditions in the soil may be responsible for the trouble. The lettuce problem is accordingly being tackled much in the same manner as that adopted in the case of the cauliflower.

The results of a Brisbane experiment on fertilizer uptake in the cabbage indicate a definite time limit to profitable fertilizer application on this crop. Complete fertilizer mixtures were applied at various intervals, firstly at the time of planting, and then at seven-day intervals up to forty-nine days after planting, each set of plants receiving only one fertilizer application. The results suggest that, under the conditions prevailing in this experiment, fertilizers should be applied within three weeks of transplanting the seedlings to the field.

Work on the carrot was confined to determining the conditions of flower and seed production, but some months will elapse before any information is available from this project.

Legume Seed Inoculation.

Once again there was a marked increase in the demand for cultures of *Rhizobium* for the inoculation of the seed of the commonly grown legumes; indeed, the number of cultures supplied during the first six months of 1942—namely, 391—was not far short of the total of 436 supplied during the whole of the 1940-41 departmental year. Lucerne and lupin strains of inoculum were most in demand between January and June of 1942, with a fair demand for inoculum for use on pea, bean, cowpea, and soy bean.

Field testing and demonstration of the effects of lucerne seed inoculation were initiated at Helidon and Oakey, and field tests with inoculum on commercial varieties of beans were carried out in the Maroochy district. The later indicated that, in all probability, a suitable strain of inoculum is already quite widely distributed in the soils of the main bean-growing districts between Brisbane and Gympie.

Entomological Investigations.

During recent years, dusts and sprays, prepared from plants which have long been used as fish poisons by natives of the tropics, and which are generally referred to as derris products, have been widely employed for the control of pests

of cabbages and other vegetables. Unfortunately, this type of insecticide is now unobtainable and alternatives must be employed. Nicotine sulphate at double strength may give a reasonable degree of control of the grubs of the cabbage moth, and may therefore be used instead of a derris product. It is, however, in short supply and, at double the normal strength, is rather an expensive spray; hence attention was given to investigating the possibility of other sprays or dusts taking the place of derris and nicotine sulphate. Preliminary results indicate that a summer spraying oil, used at a strength of 1 gallon of the oil to 60 gallons of water to which 4 lb. of soft soap has been added, may quite probably be a satisfactory alternative to use once the cabbages have commenced to heart; prior to that stage being reached an arsenate of lead dust may be employed. Phytocidal tests so far have given no evidence of injury following on the application of this oil spray, which, however, does remove the bloom that is characteristic of most varieties of cabbages. Field experiments with this and other spray schedules are now under way in the Gayndah district, and preliminary work on possible alternative dusts has also been initiated.

The potato tuber moth was another vegetable pest which received some attention during the past few months. Fumigation of the tubers with carbon bisulphide is effective in destroying the larvæ and pupæ of the moth, but it does not prevent reinfestation and treatments for that purpose were accordingly tested. These indicated that a 1 per cent. rotenone derris dust, applied at the rate of 6 oz. per hundredweight of tubers, gives adequate protection against reinfestation for at least two months; hence, when it is once more freely available, derris dust may be employed for this purpose. Arsenate of lead, applied at the same rate as derris, gave equally satisfactory protection against reinfestation in these experiments, but it obviously could be used only in the case of seed potatoes; even for such potatoes, it would probably be preferable to use the non-toxic derris dust.

The summer of 1942 witnessed an extremely severe outbreak of the bean fly, with consequential heavy losses in both commercial plantings and in home gardens. The reaction of Epicure beans, which were being grown for the first time on a commercial scale in this State, to bean-fly attack was of particular importance. Unfortunately, all the evidence accumulated during the season indicated that they are much more susceptible to bean-fly attack than the dwarf varieties. The severity of the bean-fly outbreak lead to suggestions that cresylic acid might be of value for bean-fly control, especially in view of the shortage of nicotine sulphate, and small-scale tests were accordingly undertaken. Tar distillates, which contain cresylic acid, and tar distillates and petroleum oil sprays were tested for the effects produced both on the sprayed foliage and on the fly infestation. The results obtained indicated that, at the strengths at which they were tested, they were less effective in controlling the fly than the recommended nicotine sulphate-white oil spray and, furthermore, at the concentrations at which it was used, one of the tar distillate sprays, both when used alone and in combination with petroleum oil, was responsible for severely burning the sprayed foliage.

The cotton entomological programme was most seriously hampered by the vagaries of the weather—e.g., the extremely dry conditions prevailing early in the season in the Central Burnett made it impossible to initiate the maize trap crop experiments planned for the Gayndah district, while, later in the season, excessively heavy rains, during February, played havoc with some of the other experimental and observational areas.

The corn-ear worm was not plentiful in cotton until the middle of December when, following on the occurrence of about an inch of rain in the central cotton-growing districts, heavy egg-laying took place on about 5,000 acres of cotton in the Callide Valley, and also in some sections of the Theodore area. Very dry weather then supervened and shedding was heavy on rain-grown cotton, irrespective of whether it was infested or uninfested by the corn-ear worm. Spraying plants were used to some extent at Biloela, Theodore, Monto, and Gayndah for the control of this important pest, and at the Research Station at Biloela all the crops were sprayed several times.

The pink boll worm project at Glenmore Ginnery was completed, and the final report showed that few, if any, of the larvæ now survive the ginning process. The probable explanation of this very satisfactory position is that an improved type of cleaning machinery was introduced a few years ago, and it evidently eliminates most of the larvæ in addition to removing vegetable matter. Such larvæ as are not eliminated in the cleaning process are apparently killed in the gins.

The cotton jassid was again the subject of a considerable amount of field observational work, and some very useful information was obtained regarding this insect and the reactions of its host plant to infestation.

Stored products pests were featured in this year's programme of entomological projects, and an officer was chosen to work exclusively on insect pests in emergency food supplies with the understanding that he pay particular attention to possible infestation in flour.

Some useful information was obtained regarding the distribution and relative importance of flour pests in this State, but the precise position will not be ascertained until a larger number of districts have been surveyed. It would appear probable, however, that the flour-beetle of outstanding importance in Queensland is the rust-red flour beetle, and that the rice moth, at least in some districts, can be an important pest of flour, particularly towards the end of the storage period. Experience indicates that a factor of outstanding importance in maintaining flour stocks free from insect infestation is strict attention to the principles of hygenic storage.

Further work on the Darling Downs indicated that proximity to wheat dumps at railway sidings had little influence on the initiation of insect infestation in wheat in the field. Work was also continued at Toowoomba on the treatment of seed wheat with various dusts for protection against weevil attack, the dusts used in this year's experiments being dolomite, mercurial dust, copper oxychloride, and copper carbonate, all but the first of which are, of course, primarily fungicides.

The origin of shell breakages in peanuts, which expose the kernels to insect infestation, was the subject of inquiry during the recent peanut harvesting season. Breakages may occur in the picking machines, in the threshers, and in the silos, but it appears that the trouble is more pronounced in threshing than in picking machines, and that it is less important in the silo-handling operations than might have been expected. Recent improvements in the design of threshers tend to reduce the amount of shell breakage and, as the older machines are replaced by those of newer design, there should be a progressive decline in the percentage of broken shells in the peanuts delivered to the silos. Work with a paraffin-pyrethrum spray for dealing with infestation when it does occur in the silos was continued.

One of the most important projects in forest entomology was a large scale test of measures designed to protect logs against insect infestation while in storage. The logs were sprayed with creosote and the ends greased at a cost of 1s. 6d. per 100 supercial feet for materials, labour and handling charges and, at the end of five months, they were found to be in a highy satisfactory condition and to be exhibiting little or no sign of powder post beetle infestation. The main objective in this experiment was to hold in safety a stock of logs which could be drawn on to maintain continuity of milling operations during those considerable periods when climatic conditions preclude the haulage of logs from the scrub. The procedure adopted was fully effective in achieving this objective. Starch depletion experiments on red tulip oak in North Queensland suggest that the effect of high ringing is much the same as that produced in spotted gum in South Queensland, where this procedure promises to be an effective method of eliminating powder post beetle infestation in logged timber.

The lantana leaf bug position did not change materially during the past twelve months, and there is so far little or no evidence that this insect is likely to be of any real value south of Townsville. It has to be remembered, however, that most of the colonies liberated in Central and South Queensland have had rather a gruelling time climatically, and it may be that some of them will present a more hopeful picture in the event of favourable conditions being experienced in 1942-43.

Plant Pathological Investigation.

The five-year programme of work on tomato diseases and their control by spraying and dusting was completed late in 1941. So far as spraying is concerned, it would appear that the insoluble copper compounds tested were just as efficient fungicides as Bordeaux mixture, and they possessed the additional merit of being free from the slightly adverse influence on yield which may occur when Bordeaux mixture is used. With respect to dusting, both basic copper carbonate with kaolin as a filler and dehydrated copper sulphate with hydrated lime as a filler gave effective disease control. As between spraying and dusting, it would appear that, when disease is present in epidemic proportions, spraying may be more effective than dusting; furthermore, dusting usually entails more frequent applications than spraying. Under conditions of average infection, however, dusting is just as effective in tomato disease control as spraying, and it has the advantage of being easier of application.

The treatment of seed wheat was again investigated at Toowoomba, the subject having been reopened as a result of successful Commonwealth investigations on weevil control. The points under investigation are—firstly, the effect of the inert dust treatment of wheat, for weevil control, on the subsequent application of a fungicidal dust for smut control, and, secondly, the possibility of certain fungicidal dusts functioning also for the control of weevil infestation.

The results of the cotton-seed treatment experiment referred to in last year's annual report were not available when that report went to press. However, when received,

they indicated that the use of organic mercury dusts on the seed did result in a slightly increased yield. The experiment was accordingly repeated during the 1941-42 season, but once again the final picking figures are not yet available, and the assessment of the results will have to be postponed to next year's report.

Mention was also made last year of small scale phytocidal tests of certain combination sprays which were under consideration for inclusion in an apple powdery mildew experiment in the Stanthorpe district. The field experiments implied in that work were initiated in 1941, and were designed to determine the combined effects of spraying, pruning, and fertilizing in severe apple powdery mildew infection. There is already an appreciable reduction in the amount of mildew following both spraying and heavy pruning, but more than one season's work will be required before any degree of finality is reached in this project.

A survey of maize diseases on the Atherton Tableland furnished useful information both with respect to their relative importance and to their life histories. The ear-rots were quite the most important maize diseases on the Tableland, and were found to be most commonly caused by *Diplodia* spp., *Giberella zeae*, *Fusarium* spp., and *Basisporium* sp. Maize smut, caused by *Sorosporium reilianum*, was responsible for some loss on a few farms.

Attention was devoted to a lucerne disease which is prevalent in the Millaa Millaa, Peeramon, and Malanda sections of the Atherton Tableland. It is a stem anthracnose caused by a species of *Vermicularia*, the incidence of which appears to be closely related to the rainfall and to the acidity of the soil. All the three sections mentioned have a fairly heavy to heavy rainfall, but in the wettest of the three—i.e., Millaa Millaa, the thinning out of the stands of lucerne by this disease seems to be particularly rapid. On the more alkaline soils in drier sections, such as Kairi, *Vermicularia* is present, but it does very little harm.

A subject of minor investigation at Atherton was the occurrence of mouldy balls in silage. It appears that, where the rate of consumption of the silage is slow, air percolates into the surface 6 inches, and thus encourages the growth of aerobic fungi. If the silage is used at the rate of 6 inches daily, the trouble should disappear.

The survey of maize and lucerne diseases on the Atherton Tableland was one aspect of the Tableland investigational programme, and was undertaken to assist in the solution of the complex set of problems which has arisen in recent years in this section of the State. Developments in the war situation, however, necessitated the closing down of this work.

A disease of Bathurst burr was observed to rapidly kill infected plants in several districts during 1942, and it may be of some value in the control of this weed pest. It must be remembered, however, that because of late rains, the Bathurst burr plants were young and growing rapidly during the cool, wet weather experienced towards the end of summer; hence some at least of the conditions which may have influenced the incidence of this disease during 1942 were hardly typical. A species of *Colletotrichum* was isolated from infected plants, and typical symptoms were reproduced on artificial inoculation.

Botanical Investigations.

The botanical work within the Division continued much along the same lines as in previous years, and a great deal of advisory work, both on behalf of the general public and on behalf of officers in other branches of the Department, characterised the activities of the Government Botanist and his staff during the year under review. Once again considerable assistance was given to the work of the Poison Plants Committee, and there was active co-operation, in certain aspects of the work, with those officers who were engaged on a survey of the status of rubber-producing plants within the State of Queensland.

In spite of having to work with a depleted staff, the Government Botanist was able to devote some time to further investigational work on the flora of Queensland. This will doubtless lead to the publication, in a scientific journal, of a further instalment of "Contributions to the Queensland Flora."

Soils Investigations.

During the first half of the departmental year, soils investigational work was carried out on a series of experimental plots, planted to cotton, in the irrigated sections of the Burdekin Delta. The main objective of this work was a soils classification which would permit of a rapid assessment of the general fertility of any particular field, and of the type of cotton which it would be likely to produce. A detailed analysis was made of the physical properties of the soil types, with particular reference to moisture content. The programme of work on irrigation problems in cotton-growing districts in Central Queensland, handled by the officer seconded from the Soils Division of the Council for Scientific and Industrial Research, was satisfactorily completed.

The necessity for producing largely increased quantities of vegetables, in spite of the growing shortage of fertilizers, lead to the initiation of a series of investigations designed to determine the fertilizer requirements of the soils of the important vegetable-growing areas at Wellington Point, Cleveland, and Redland Bay. By combining field trials and laboratory determinations, it is hoped to provide a soil service to the grower by means of which a rapid assessment can be made of the requirements of any particular field. It has already been demonstrated that the heavy applications of fertilizers, which have been made over a period of years, has resulted in the accumulation of considerable amounts of both phosphate and potash in many of the cultivated areas in the vicinity of Brisbane. Another project, associated with the soils investigations in the vegetable-growing areas mentioned, was a survey of irrigation waters in order to determine the toxic limit, under the climatic conditions prevailing, of dissolved salts in such waters. This and the vegetable soils project constitute a joint programme in which officers of the Division and of the Agricultural Chemist's Branch are co-operating.

The survey of the Atherton Tableland soils has made further progress and sufficient data has now been obtained for the preparation of a regional map. One of the main objectives in this work was the elucidation of the factors responsible for the pronounced variations in fertility which occur on the Tableland and the determination of the most effective and practical manner in which lack of fertility can be remedied. Work on this project, however, has been suspended to free the officers engaged on it for duties which are, for the time being, of more immediate importance. An extensive series of pot experiments with soil from the horticultural experimental area at Kamerunga, near Cairns, was also carried out, to elucidate soil fertility problems which had developed on the plots devoted to papaw experimental work. The pot experiments gave results which suggest how the position can be improved as soon as more normal times return.

Apiary Work.

Field inspectional work in connection with the administration of "*The Apiaries Act of* 1938" has been drastically curtailed because of staff shortage. A considerable amount of advisory work in connection with beekeeping, however, has been carried out during the departmental year.

Publications.

Ten articles, prepared by officers of the Division, appeared in "*The Queensland Agricultural Journal*," and a number of contributions were also made to "*The Weekly News Bulletin*"; some of the latter were reprinted in "*The Queensland Agricultural Journal.*" Divisional officers were also joint authors of the pamphlets recently published on tobacco growing, potato growing, and home vegetable gardening. Finally, reference must be made to the appearance of Volume 1 of "*The Queensland Agricultural and Pastoral Handbook*," to which contributions were made by eight officers of the Division. The publication of this volume completes the series dealing with all aspects of plant industry in Queensland.

ROBERT VEITCH,
Director of Plant Industry (Research).

REPORT OF THE DIRECTOR OF AGRICULTURE.

Beneficial rains early in June conduced to the satisfactory growth of winter crops in July—a month of bright sunshine and intermittent showers. Except for scattered falls, too light to give appreciable relief, the spring months were very dry. In some places wheat crops had to be fed off. In dairying districts, winter-grazing crops, unless late-sown, provided little feed for stock. Light rains in October were too late to benefit grain crops, and yields were under average. Scattered rains in November brought some relief and, in places, made summer sowings practicable. Dryness in December caused a depletion of fodder reserves. Storms in January were too light to do much good. February was a month of heavy and continuous flood rains, especially on the Darling Downs and in the Burnett Basin. A progressive improvement in seasonal conditions continued during a period of moderate, regular rainfall and mild weather until the end of June. Because of earlier seasonal dryness, most summer crops were under average, but late-sown crops yielded abundantly. The present winter is the mildest experienced for years.

Because of the acute shortage of potatoes, an appeal was made to growers in the Northern agricultural districts to produce potatoes under contract to the Commonwealth Department of Supply and Development. The response to this appeal has exceeded expectations and substantial quantities should be available at a time when they cannot be produced elsewhere in the State.

Although the acreage under grain sorghums was considerably greater than that of the previous season, an extraordinarily keen demand led to the quick disposal of the entire crop.

Navy bean seed was distributed among a number of growers for production under contract to the Commonwealth Department of Supply and Development. The results obtained were very satisfactory yields ranging up to 20 bushels to the acre. An appreciable quantity was made available for canning.

Under a similar contract, seed of the blue field pea was also distributed, and present crop prospects indicate a satisfactory harvest. Although field pea cultivation for fodder has long been practised in Queensland, production of edible pea seed hitherto has been largely confined to the southern States.

In the northern tobacco districts yields of tobacco leaf up to 1,000 lb. to the acre were obtained from irrigated areas and from early plantings under natural rainfall. There was a reduction in the yield from later-planted acreages because of dry weather during March and April. Few of the late-planted areas yielded as much as 600 lb. to the acre. Late storms improved the crop situation.

In the South-west, where tobacco is grown entirely under irrigation, a prolonged dry spell made it necessary to impose water restrictions, but timely rains in January relieved the situation. The remainder of the season proved excellent for tobacco, and the yields of good-quality leaf was, in consequence, satisfactory.

The estimated tobacco yield of 2,535,900 lb. is higher than that of the previous season (2,281,968 lb.).

Investigational work in the Northern tobacco areas, in collaboration with the Division of Plant Industry (Research), included a field survey of nematode infestation, five-year rotational trials, tobacco seedbed experiments, and work with green manure crops. In a seedbed experiment, sterilising by heat of burning wood seemed to give better nematode control than steaming in open beds; while both forms of sterilisation controlled the nematodes for twelve weeks in the concrete beds. In the south-western tobacco areas, single plot varietal demonstrations were conducted at six locations. Seed selection with Wyemo, a variety increasing in favour, is in progress.

Because of Army enlistments of members of the staff, soil-conservation work had to be temporarily suspended.

Plant introduction work was continued at Moggill, and a large number of native and introduced legumes, as well as fodder crops, were grown. In addition, special attention was given to the production of vegetable seed and other field work related closely to other national requirements.

Departmental attention and activities were concentrated on the production of food crops and in the more intense organisation involved in rapidly changing circumstances. Details of organisation and of other activities related to the war effort are, necessarily, the subject of separate departmental reports.

General cropping results and conditions during the year are contained in the following field reports:—

SOUTHERN DIVISION.

Rainfall from July to October was considerably under average, and the lowest for seventy years in many centres. Relief rains fell in November, but December and January were dry and hot. The long dry spell ended in February, when falls ranging up to 7½ inches were recorded.

During the March-June period seasonal conditions were fairly satisfactory, except in the south-west, where rains were light.

Many farmers have conserved fodder in the form of trench silage, some of which has been entrenched for over three years.

Wheat.—Only light rains were registered during the growing period. About half the crop was harvested in favourable weather, and excellent grain obtained, but storm rains subsequently caused considerable losses.

A notable experience was the behaviour of the Queensland-bred wheats, which continue to increase in favour with growers.

As a result of the autumn rains, early-sown wheats provided good grazing.

June rains enabled farmers to complete sowings for the 1942-43 season, and the crop is now making excellent progress.

Many crops considered too poor for harvesting in 1941 produced 3-5 bag-yields of self-sown wheat during the autumn. Other areas of self-sown wheat were cut for hay.

The total yield from an area of 350,000 acres is estimated at approximately 3,000,000 bushels.

In the Pittsworth District Wheat Crop Competition, most of the eleven entries were grown on less than 1 inch of rain. The first three places were taken by Puseas, a Queensland-bred wheat, and all entries with one exception (Clarendon) represented Queensland wheats.

An aggregate of approximately 11,000 acres was inspected and seed wheat selected on behalf of the State Wheat Board. This scheme was worked in conjunction with the Pittsworth District Wheat Crop Competition.

Grain Sorghums.—This crop is winning greater favour each year, and there is a heavy demand for pure seed, chiefly of Kalo and Wheatland Milo. The projected crop area was greatly reduced because of the lateness of the seasonal rains. Results obtained from the late-sown crops were, however, generally satisfactory. Early frosts caused some losses of grain.

Maize.—Favourable yields of maize were obtained from crops sown after the February rains.

Tobacco.—The season opened up with good prospects, and a good strike was obtained from late October-November plantings. After the late January rains growing conditions were excellent for tobacco. Some losses were caused by hail, blue mould, and scalding during a heat wave.

From an area of 1,074 acres, 188 growers harvested 512¼ tons of leaf (1,025,000 lb.), equal to 954 lb. per acre.

Pasture Improvement.—Urochloa grass made rapid growth, and demonstrated its use as a control for mint weed. Seed of this grass is now available in fairly large quantities. Pasture plots comprising a number of introduced grasses were continued.

Experimental Work.—Grain sorghum, spacing trials, grain and sweet sorghum grazing trials, sorghum varietal trials, soya bean varietal trial, oat varietal trials, lucerne and flax trials were included in the experimental work for the year.

MARANOA.

The 1941 autumn and winter conditions up to June were very favourable for all crops and pastures.

Heavy frosts occurred in July, and, as a period of very low rainfall followed, pastures had become depleted by October.

Wheat yields were reduced to approximately 40 per cent. of average—only the early-sown, well-fallowed fields producing economic returns.

Dairy production was maintained by feeding silage and the grazing of failing wheat crops. Intensely dry conditions prevailed until mid-January, by which time pastures were wholly depleted, and the remaining surface water was unfit for stock. Rainfall over a period of ten months aggregated 539 points.

Hurriedly sown summer crops gave promise of excellent returns, but with the increasing rainfall in February record floods inundated Chinchilla, Jandowae, Condamine, and all adjacent districts, causing extensive damage to fences, pastures, and cultivated land, and some losses of stock.

The year terminated with good rainfall conditions and a return to normal production.

SOUTH BURNETT.

Seasonal conditions were abnormally capricious. Yields of the most important crops were below average. The six months from July to December were practically rainless. Some relief rains fell at the end of December, but the dry spell was not generally broken until the end of January. Mild cloudy weather following this rain checked maximum crop growth, but the absence of early frosts permitted the maturing of many late-planted crops. Winter conditions up to the end of June were unusually mild, with few frosts.

Peanut crops suffered probably more than other crops from the adverse seasonal conditions, and the district yield was far below the estimate. The quality of the crop was also low because of long exposure in stooks awaiting suitable

thrashing weather. The total yield was just above 5,000 tons. Practically the whole of the Virginia Bunch crop is now planted with selected seed grown under supervision. One of the beneficial results of controlled seed production has been the almost entire elimination of running type plants. Preliminary work on Red Spanish selections is now complete, and bulk increase of selected seed will commence next season.

Early maize crops failed, but late maize crops produced satisfactory yields from a fairly large acreage.

Production of Poona peas was below the average crop, but good-quality seed was generally produced. Canning-bean crops, both army contract and ordinary commercial crops, yielded satisfactorily, the yields averaging about 12 bushels, with an upper limit of 20 bushels per acre.

Soil erosion was serious over most of the district during the February rain, many paddocks being so seriously affected that their productive capacity has been reduced by about half. The encouraging results obtained from areas under broad-base terraces will almost certainly lead to an increased adoption of this control method.

Fodder conservation is not practised to the extent warranted by average seasonal conditions. Suitable fodder crops can be grown during almost every season, but it is only in rare instances that an attempt is made to conserve them.

The influence of the war on crop markets has resulted in many inquiries from farmers about alternative crops and methods of production. The results obtained from canning beans have aroused interest, and considerably increased acreages would be planted if required.

CENTRAL DIVISION.

Rockhampton.

The season was very similar to that of 1940-41, being very dry during the first six months, and yielding splendid rains during the second half-year.

Pastoral conditions were fairly good, although some losses occurred, chiefly with aged stock and on overstocked properties.

The grain sorghum acreage was about two-thirds that of the previous year. All grain harvested has been marketed.

Because of the delayed summer rains, the area planted to sweet sorghums and maize was also reduced. Maize yields were disappointing.

Pumpkins planted in January and February yielded well, and there is a keen demand for the crop.

It is estimated that the peanut yield will attain 250 tons.

Both the spring and autumn potato plantings were considerably reduced. There has, however, been a slight increase in the area planted with sweet potatoes.

Some very satisfactory crops of brown millet were harvested.

Dawson and Callide Valley wheat yields were below average, as the winter and spring rainfall was very light. Wheat planted during May-June, 1942, was established under excellent cropping conditions.

Experimental work included maize versus sorghum trials, grain sorghum varietal trials, tobacco pure-seed plots, and native legume trials.

Bundaberg.

Seasonal conditions were erratic. September to January was very dry. In January seasonal conditions improved greatly, but the record February flooding of the Burnett caused enormous damage to crops, especially sugar-cane, cotton, potatoes, pumpkins, maize, and vegetables. Damage to property and losses of stock also resulted from widspread inundation. Later rainfalls were ample for all crops, including sorghums and tobacco.

Winter crops grew to perfection under mild weather conditions. Vegetables were in abundant supply, leaving a surplus for stock.

Approximately 500 cotton-growers planted an aggregate of about 2,400 acres, but the crop on 400 acres was ruined by flood waters. One grower obtained a return of £400 from 9½ acres under irrigation.

Tobacco yields were between 500 and 600 lb. per acre.

Experimental work included a sweet sorghum varietal trial, a maize trial, onion varietal trials, and extension oat plots—all in the Monto district.

In the sweet sorghum trial, Sugardrip proved to be the best all-round variety, while the variety Honey gave the greatest bulk.

Mackay.

Climatic conditions generally were favourable for crop production. Rainfall was normal, with total of 60 inches, 35 of which were registered in February. Tobacco, cotton, potato, and vegetable crops yielded very satisfactorily. Tobacco crops were more successful than in former seasons, and unblemished bright leaf was produced. Prices ranged up to 64 pence per lb.

Considerable interest developed in cotton-growing, and sufficient seed was distributed to plant 600-700 acres. Around Mackay the planting periods are July-August and November-December.

Approximately 2,600 bags of seed potatoes were distributed for growing under contract, with fairly satisfactory results, the yields ranging from 2 to 5 tons per acre. Bismark is, apparently, the most suitable variety in this district. Substantial areas of vegetables were planted for both contract and private sale.

NORTHERN DIVISION.

Ayr.

The first six months of the year were dry; although scattered storms fell during January, the wet season did not set in until February. March was dry. Light showers during April and May were followed by unseasonably heavy rain in June.

Details of potato fertiliser trials completed during November, 1941, have been recorded.

The heavy June rain was inopportune, and on the heavier soils the potato crop suffered some loss in yield. However, except where the crop had been heavily watered just before the rain, the crops yielded quite satisfactorily. Sclerotium, target spot, and ladybird were the major pests and diseases observed.

Increased areas of many vegetable crops were sown—particularly cabbages, pumpkins, tomatoes, and sweet potatoes.

Among the important agricultural developments of the year was the extensive cultivation of cotton under irrigation in the Burdekin Delta.

Atherton.

The period from November to January is usually stormy in this district, but last summer only isolated storms occurred around Atherton and Upper Tableland areas. The main maize-planting was, therefore, made from early to mid-February, and, contrary to ordinary seasonal experience, these late plantings will yield heavy crops.

A total area of 21,900 acres is estimated to yield from 12,000 to 14,000 tons.

Wheat and oats were extensively planted as winter hay crops on fallowed land which normally would have been planted with maize. Crops were generally successful, one farmer alone cutting about 200 tons.

The peanut yield—about 90 tons—was under average. Cowpea and soya bean crops also were disappointing.

A considerable expansion in vegetable production is in prospect.

Dimbulah.

Tobacco production estimates for the 1941-42 season show an improvement on the previous year's crop. Growers numbering 162 planted 1,500 acres, of which 1,450 acres attained maturity, yielding 700,000 lb. of leaf. Irrigated areas aggregated 270 acres, from which returns approximated 200,000 lb. of cured leaf—a considerable increase in average yield per acre over the non-irrigated crops. A 10 per cent. increase over the previous season's values would make a gross return of approximately £100,000.

Seedbeds were generally very successful, particularly where benzol was used regularly.

Because of irregular rainfall, planting extended from October to late January. Most of the dry-farmed areas were machine-planted—a successful method in these areas. The rains received in January were of great benefit to established crops, but the absence of rain in March delayed maturity of late plantings, causing loss of weight and colour in the leaf.

The leaf miner was very troublesome in several areas. About 100 tons of leaf was graded on the farms, and was sold soon after delivery in Brisbane. Prices generally have been excellent, some parcels of good-quality leaf averaging over 48 pence per lb.

Experimental work for the year included a seedbed demonstration, using concrete seedbeds and soil sterilised by various methods. A long-term rotational experiment also was commenced.

Important recommendations include—

- Grow seedlings in concrete-constructed beds;
- Benzol seedlings under galvanised-iron covers at least 12 hours in 72 or preferably 48;
- Save labour by using a planting machine;
- Plough-cultivate throughout the crop;
- Top high first time and lower if necessary whilst suckering;
- Grade on the farm.

MAREEBA.

Weather conditions prevailing up to early January were very unfavourable, with the result that crops wilted and were pest-infested by the time relief rains occurred. February storms changed the whole outlook, and a reasonable crop then became assured. By March, crops in all parts of the district, apart from the earlier irrigated crops, were coming to maturity, and harvesting had actually commenced.

In the seedbeds it was found that partial sterilisation of the soil is reasonably effective in controlling nematodes. The standard of seedlings produced was higher, and all growers were able to produce their requirements with little loss. The total area of tobacco planted in the irrigation areas of Emerald Creek, Barron River, and Biboohra was 550 acres. Despite pests, disease, and water restrictions, the irrigated crop proved as good as any previously grown.

Harvesting in the dry-farmed areas commenced late in February. The favourable growing conditions after the January-February rains resulted in comparatively good crops of good-quality leaf.

The total estimated acreage under tobacco for the season was 1,600, including 550, or a little over a third, under irrigation. The yield of approximately 350 tons is well below that of the previous season. Higher values compensated to some extent for the lower yield.

CONCLUSION.

Both field and head office staffs, in addition to carrying on a varied experimental programme and their normal advisory duties, devoted themselves to many unusual tasks associated with war-time agricultural problems, particularly in relation to production, transport, distribution and preservation of foodstuffs. With a cheerful acceptance and efficient performance of many onerous duties arising out of the national war situation, and of much extra work because of staff depletion, these officers have rendered valuable service to the State.

CHAS. J. McKEON,
Director of Agriculture.

REPORT OF THE DIRECTOR, BUREAU OF TROPICAL AGRICULTURE.

The outbreak of war with Japan caused a complete re-orientation of work at the Bureau. From June onwards attention has been focussed on problems of immediate importance to the war effort: raw rubber production, hard fibre investigations, and derris powder for insecticidal work.

Rubber.—An experimental area of the rubber tree of commerce planted at five different spacings at South Johnstone will soon be completed. Seed supplies were arranged co-operatively through the Commonwealth and Queensland Governments and the Council for Scientific and Industrial Research. The object of this work is to determine whether raw rubber can be produced from *Hevea* by an entirely different technique to that employed on the plantation. Mechanical methods will be used and harvesting may commence within approximately 18 months from the date of planting.

A considerable amount of work on the rubber-vine to determine its value for raw rubber production on a large scale has been accomplished. Considerable areas of rubber-vine growing in the wild state exist in the Charters Towers-Ravenswood and Georgetown districts.

The Government Botanist has made many identifications on rubber-bearing plants, which have been of material assistance in these investigations. A small experimental area has been obtained at the Animal Health Station, Yeerongpilly, for the cultivation of promising rubber-bearing plants suitable to the climatic zone of South-eastern Queensland.

Fibre Investigations.—The common weed, pink burr, which covers large areas in coastal North Queensland, has been carefully examined for the production of fibre as a substitute for jute. Retting tests in the South, carried out by the C.S.I.R., indicate that this weed may form a valuable source of hard fibre, if a suitable technique for North Queensland conditions can be evolved.

Derris Work.—Intensive propagation, aimed at the rapid multiplication of promising derris plants at the Bureau of Tropical Agriculture, has been effected. The object is to build up a supply of first-class planting material for large-scale development of this important insecticidal plant.

Pasture Investigations.—This work has concentrated on the trial of the following tropical legumes for pasture work:—Calopo, Centro, Puero, Stylo, and various strains of pigeon peas.

Suitably replicated pasture experiments have been laid down to determine accurately the effect of grazing and phosphate application on these legumes, alone and in various combinations. In the course of the year a five-acre plot of Stylo was planted on red acid soil near Innisfail. In spite of unsatisfactory weather conditions, this legume has made remarkable growth, and within six months completely dominated an area previously covered with inferior grasses. The tropical legume work shows considerable promise of development over a large area of Queensland. Trials in the Mount Garnet district on Cashmere Station—where climatic conditions are very different to the coastal country—have given valuable results. Plots of these legumes were also established at Moggil.

Drug Plants.—Plots of Cephaelis ipecacuanha, Strychnos nux vomica, and Cinchona have been established.

J. LEEMING SCHOFIELD,
Director, Bureau of Tropical Agriculture.

REPORT OF THE DIRECTOR OF COTTON CULTURE.

The 1941-42 cotton crop was produced under an extraordinary range of climatic conditions. In the Northern Darling Downs, the Southern and the South and Central Burnett districts the extremely dry winter, spring, and early summer prevented the planting of much of the acreage for which seed had been purchased, only the farmers experiencing the centre of light storms receiving sufficient moisture to establish a stand of cotton. In the Upper Burnett and the inland areas of the Central district, very satisfactory early winter rainfall was followed by erratic planting rains which only allowed of the successful establishment of considerable early plantings in some sections, while in others it was not until December that satisfactory stands were obtained. From mid-December until the end of January an exceptionally hot dry period prevailed in all districts following on which a week of torrential rainfall ranging from 11 to 21 inches occurred over much of the areas under cotton. Flooding of much low-lying country along streams in the central district and the Upper Burnett caused considerable loss of cotton crops, while in the Central Burnett the Burnett River, which rose to a height of 64½ feet at Gayndah, not only destroyed most of the cotton crops grown under irrigation, but also damaged an appreciable number of the irrigation plants. From then onwards in most districts excellent weather for the development of the cotton crops ruled, with the exception of showery periods in June during the harvest. Killing frosts did not occur until the last week in July.

Governmental Programme.—The adverse seasonal conditions severely handicapped the Queensland Government programme for the comprehensive development of the cotton-growing industry. The installation of individual irrigation facilities on streams and in wells was, however, increased to a total of 145 plants. Water supplies were so seriously reduced in some streams towards the end of the dry period, which really concluded a period of two years in which no replenishment of soakage or run-off occurred, that many plants could not operate sufficiently to prevent the dry weather damaging the cotton crops. The flood conditions subsequently experienced destroyed what crop was being carried on such areas, and many very promising crops on other irrigation areas were likewise affected. Excellent returns were obtained on some of the more fortunately located areas, however, and as a result adjacent farmers with privately purchased irrigation equipment intend to grow cotton with the assistance of irrigation during the coming season. The yields of cotton obtained in the irrigation demonstrations conducted in the latter half of 1941 in the Burdekin Delta under the direction of this Department were sufficiently promising to warrant the stationing of a strong team of departmental officers there to obtain as much acreage of cotton under irrigation as possible, and to instruct the farmers in the growing of this crop. Altogether the results obtained from the irrigation of cotton in different sections of the State were sufficiently promising to warrant the further development of this form of cotton growing wherever economically possible.

Acreage and Yields.—The details of the main acreage and yield are reported elsewhere by the Director of Marketing. A few outstanding yields are reported, however, to indicate the returns which can be obtained under both the rain-grown and irrigation methods of cotton growing. Where satisfactory planting rains were experienced, growers, following the departmental recommendation of planting after grassland ploughed early in the autumn, produced up to 1,000 to 1,200 lb. of seed cotton per acre, as compared with not over 500 to 600 lb. on neighbouring late ploughings of old cultivations. Undoubtedly a greater adoption of the recommended cultural

methods for growing cotton under rain-grown conditions would substantially increase the average yield per acre obtained in most seasons. On the more successful areas of cotton grown under individual supplementary irrigation facilities, several yields of 1,300 to 1,500 lb. of seed cotton per acre were obtained, with one area of 7 acres averaging 2,500 lb., while a 1¼-acre area produced the outstanding yield of 3,000 lb. of seed cotton per acre. Yields approximating 1,500 lb. per acre of seed cotton of good quality appear likely to be obtained by the most successful growers on the Theodore Irrigation area.

Grades.—The grades of many of the cotton crops have been somewhat lowered through long exposure to the weather, brought about by the lack of sufficient labour to harvest the crops as promptly as required to produce cotton of good grade. Although every effort was made to obtain ample labour through normal channels, it was impossible to cope with the harvesting at times, particularly in the Callide Valley. Military enlistments and call-ups and casual labourers obtaining more highly paid employment at attractive rates in war-time industries seriously handicapped farmers in obtaining sufficient labour.

Biloela Research Station.—Although the dry mid-seasonal conditions seriously affected all rain-grown experiments, the crops responded well after the flood rains and, with the long frost-free period, mostly produced satisfactorily, considering the season experienced, many of the experiments producing 800 lb. or better of seed cotton per acre. The value of the grassland-cotton rotation was once more confirmed—gains up to 680 lb. seed cotton being realised in even the third year of cotton after the ploughing of the grassland. The quick-maturing varieties again outyielded the slower varieties in the rain-grown varietal trials conducted under various soil conditions, Triumph usually being superior to all over cottons in the tests. The yields obtained on the area reserved for testing the value of supplementary irrigation averaged better than those produced in the previous season. The irrigation versus rain-grown experiments clearly showed the value of the former method of growing cotton on loamy soil and under such irregular seasonal conditions, a gain of 1,158 lb. of seed cotton per acre being obtained. The varietal trial of cottons suitable for growth under irrigation produced from 1,885 to 2,206 lb. of seed cotton per acre. As in the previous season, no significant difference in yields were obtained either by applying different amounts of pre-planting irrigation or in the spray versus furrow methods of irrigating.

Pure Seed.—Although adverse seasonal conditions definitely handicapped some phases of the work of developing improved strains of the more extensively-grown varieties, appreciable progress was made in some of them which should materially assist the industry as a whole. The more important results obtained in the cotton-breeding programme are described under the plant breeding operations of the Division of Plant Industry (Research).

Instructional.—The field staff had another very busy season in carrying out a comprehensive campaign to increase substantially the acreage of cotton, as well as attending to the usual advisory duties, and supervising a greatly increased number of areas of cotton being grown under supplementary irrigation.

Insect Pests.—The only seedling pest of any consequence was the tip worm which destroyed a considerable number of the terminals in the early planted cotton in the Callide Valley. Although recorded in the Central Burnett and in coastal areas previously, this pest had not attracted attention in the Callide Valley before.

Weed growth in spring in the Callide Valley ensured a rapid increase in the corn-ear worm population which culminated in a severe outbreak on cotton in December. Square damage in both irrigated and non-irrigated cotton was serious. The outbreak ceased when very dry conditions occurred in late December and January, and this pest caused no further trouble in the more important cotton-growing areas. This may, in part, have been due to the fact that the maize crops grown for grain and fodder were all planted late, and moths on the wing in early autumn selected this host plant in preference to cotton for egg-laying.

In autumn both the cotton looper and the rough boll worm were very numerous. The leaf destruction caused by the former pest was, however, beneficial rather than harmful as crops, for the most part, tended to a rank habit of growth. The latter pest, however, in the Central district destroyed a large proportion of squares and young bolls borne late in the season.

The cotton jassid appeared in most crops during February and March and at that time threatened to cause appreciable damage to the top crop. Growing conditions were exceptionally good for the remainder of the season and populations seldom exceeded numbers which the plant could carry without detriment to its cropping powers. Squares were, therefore, produced and matured in spite of jassid activity which would, in a drier autumn, have been fatal to the plant.

The pink bollworm, though present in most districts, did not appreciably affect crop yields. This pest is recorded for the first time from Southern Queensland in cultivated cotton at Lowood.

W. G. WELLS, Director of Cotton Culture.

REPORT OF THE DIRECTOR OF FRUIT CULTURE.

Weather conditions during the year in the fruit-growing districts were a series of extremes. Late frosts were followed by a hot-dry spring and early summer, and it was not until late summer and autumn that rain fell in any appreciable volume, and then it was generally in excess of requirements. Such conditions reduced the production of most fruits, and also vegetables from non-irrigated farms. However, growers' productive losses were offset by a stronger demand and higher prices. In the Stanthorpe district there was an almost total absence of fruit fly, and consequently marketings from this region were much heavier than in the previous year. The pome fruit crop was satisfactory.

The Commonwealth Apple and Pear Acquisition Scheme operated again, and assistance was given to the Queensland Committee to ensure its efficient working. Unit values were lower at the outset of the season, but the previous year's unit values were subsequently restored. Only medium crops of grapes and stone fruits were produced, but the quality was excellent, and good prices were realised. Economically, vegetable growers experienced one of their best seasons, mainly because of a rapidly expanding demand.

In the coastal districts weather conditions adversely affected orchards and plantations, but as market prices were high, growers generally had a good year financially.

The banana acreage has been reduced from 11,896 to 10,520 acres. New plantings which were made mainly to replace worn-out areas aggregated 2,400 acres. Production for the year was 453,000 cases, a drop of approximately 97,000 cases on the preceding year. Many growers have concentrated on the better portions of their areas, because of the high prices prevailing. Persistent outbreaks of bunchy top made it necessary to maintain a close inspection of plantations known to be particularly subject to this disease. Restriction of the supply of fertilizers has caused some deterioration in pineapple plantations, particularly on the North Coast. In the Mary Valley on the red volcanic soil the effect is less noticeable, although the percentage of stand-over plants has risen sharply. As this is probably associated with off-type plants considerable time was devoted to the instruction of growers in regard to plant selection with a view to improving production.

Nursery returns indicate a steep decline in sales of citrus trees. The demand for selected budwood was much weaker than that for the previous year, only 33,660 buds being supplied compared with 162,000. Of the total selected, 9,535 buds were obtained from the citrus budwood plot in the Gayndah district.

The selection of tomato seed of the Break-o'Day and special salad varieties was continued on a small scale, mainly in order to preserve the excellent strains now in hand. For the same reason, it will be necessary to continue small plantings each year.

On the North Coast pineapple fertility trials, trace element trials, and the harvesting and weighing of fruit at Glass House and Crookneck trials, were carried a stage further. Supervision only was given to the Avocado experimental plots. At Bowen, experiments with heat-resisting types of tomatoes were continued, and have met with some success. It has been found possible to extend the productive season by several weeks.

Instruction in the correct methods of fruit and vegetable packing to the senior pupils of some of the country schools has been continued. Visual education of growers by means of lantern lectures also was extended. Slides showing the condition of fruit and tomatoes from different districts on arrival at the markets, both local and interstate, were screened.

The Vegetable Production Committee was set up with the approval of and co-operation with the Commonwealth Government, to arrange contracts between the Department of Supply and Development and farmers for the production of vegetables at fixed prices for military requirements, and subsequently its purpose was extended to embrace production for civilian requirements. By the end of June, 480 contracts had been arranged, and practically the whole of the vegetable requirements of the forces in Queensland have been contracted for, for some months ahead, and contracts are still being arranged. The Department of Agriculture arranged these

contracts. Most of the detail work is being done by the staff of the Fruit Branch and some field officers of other branches. An intensive drive for the production of more vegetables, including the extension of home gardening, as contributory to the war effort, was so successful that, excepting temporary shortages of particular varieties, there was sufficient for all requirements.

Arrangements for the production of vegetable seed for sale under the supervision of the Fruit Branch have been made.

Staff.—Field officers of the Branch are fully employed in the campaign for increased production and in other activities associated directly with the war effort.

H. BARNES, Director of Fruit Culture.

REPORT OF THE DIRECTOR OF DAIRYING.

Dry weather continuing until February in most dairying districts resulted in a decline in production, a decline further accentuated by the reduction of labour in the industry through enlistments in the Defence Forces. Many farmers have had to reduce the number of cattle in their dairy herds and the extent of their cultivation of fodder crops.

Butter production was 95,674,500 lb., valued at £6,113,295, compared with 117,081,269 lb., valued at £7,517,172 for 1940-1941. Cheese production was 16,333,932 lb. valued at £602,539, compared with 11,731,976 lb., valued at £390,000 for the previous years.

Cheese production expanded substantially, largely as the result of a special drive for increased output for national requirements. Production for the year—16,333,932 lb—constituted a record for the State. The previous peak production was 15,749,103 lb. in 1938-39. In the course of the year, the construction of 15 new cheese factories was undertaken, while provision for building extension and additional equipment was made at 35 existing factories to cope with the augmented milk supplies.

Expenditure incurred under a scheme operated by the Dairy Produce Control Committee for indemnifying factories against expenditure in the event of the closure of cheese factory annexes at the termination of the war amounted to £132,000.

It is estimated that cheese factory suppliers have increased from about 750 to 2,200, and that when all new cheese factories are completed production capacity will be 15,000 tons per annum.

As a result of the progressive improvement in cheese factories and equipment in the past four years a creditable standard has been attained. Of 58 factories only 11 are not now equipped with a pasteuriser. Three years ago refrigeration was used at only one factory; there are now 17 factories so equipped.

As soon as the necessity for increasing cheese production became evident there was a commendable voluntary diversion from cream supply by producers; but in order to equalise the responsibility among suppliers in proximity to cheese factories action was taken during the last parliamentary session to amend *The Dairy Produce Act* for the purpose of enabling milk areas to be notified in respect of cheese factories, and 33 such areas have been gazetted.

Although for some time after July, 1941, it appeared as though Britain might not, as in the past, be able to accept all Australia's exportable surplus of butter the position has now changed and a market for all choice and first-grade butter seems assured. The exclusion of second-grade and pastry butter from the Imperial contract, however, has caused a considerable decline in the price payable for inferior butters. By resolutely attacking the problem on the farm and in the factory, the industry has been able to raise a proportion of this butter to higher grades. Moreover, a method has been evolved for the conversion of low-grade butters into pure butterfat, in which form it is acceptable to Britain. This product, too, can be shipped as unrefrigerated cargo. The disposal of inferior butters in this form will prevent accumulation in cold stores in Australia, and it is expected that these now return a much better price to the producer than has been possible for low-quality cream in the past year.

An increase in the price of butter and cheese sold in Australia was approved in March last. The basis of this price increase was 1d. per lb. commercial butter and 1½d. per lb. cheese.

In order to train additional factory operatives for the expanded cheese industry a school of instruction, which was well attended, was conducted by departmental officers at the Queensland Agricultural College.

Candidates who presented themselves for the annual examinations for certificates of competency in dairy factory work numbered 98. The candidates for each certificate were—Milk and cream testing, 65; milk and cream grading, 59; buttermaking, 8; cheesemaking, 35.

A notable improvement in the standard of technical knowledge has been reflected in the papers submitted in the recent examinations by candidates for certificates of proficiency in factory work.

This year has been the first in the history of the industry in this State in which female labour has been employed in factories. Women and girls have readily adapted themselves to the work and have proved quite efficient.

The Cream Transport Committee has collaborated with the Liquid Fuel Control Board in the maintenance of efficient deliveries to factories. To conserve liquid fuel, overlapping of cream pickup among farms situated at the extremity of cream routes and in a factory's internal territory has been eliminated and roadside pickup of cream has been enforced. Action has been taken to have gas producer units fitted to cream trucks in order to ensure adequate transport facilities for dairy produce in the event of any further restriction in the use of liquid fuel.

Butter Quality.

Despite labour disabilities on farms and in factories, transport difficulties, and unfavourable spring and summer seasonal conditions, butter quality was maintained at about the same level as the previous year.

The grading results for export and local purposes were:—

Choice.	First.	Second.	Pastry.	Total Boxes.
Boxes. 704,179	Boxes. 551,266	Boxes. 77,319	Boxes. 8,221	1,340,985
52·51%	41·11%	5·77%	0·61%	..

Cheese Quality.

The marked progress of the past few years in the raising of the quality of the State's cheese production is gratifying. The actual grading results for export cheese examined by officers of the Department of Commerce and for local, interstate, and processing purposes, examined by the State Dairy Branch, were:—

Choice.	First.	Second.	Third.	Total.
lb. 520,768	lb. 8,126,232	lb. 2,932,806	lb. 239,247	lb. 11,819,053
4·41%	68·75%	24·83%	2·02%	..

Under a scheme of co-operation with the Commonwealth authorities, a much higher proportion of the total output has been officially examined than in previous years. This scheme was of special value when grade standards for cheese for military contracts, whether in processed form or otherwise, were introduced this year. The guidance to factories as a result of the grading of all cheese has been welcomed by factories. The grading results must be regarded as very satisfactory, because of the greatly expanded production and the fact that many new suppliers have had no previous experience in the special production problems relating to cheese factory supply. The position also may be regarded as a satisfactory sequel to the campaign for the rehabilitation of the cheese industry so actively pursued by the Department and the industry in the past four years. The co-operation of factories and producers in this quality drive is acknowledged, for only by the united efforts of all associated with the industry could the present measure of success have been achieved.

DAIRY RESEARCH LABORATORY.

Butter.

The butter improvement service continued to operate throughout the year. Service was given to 45 factories, 3,665 churnings of butter were examined by means of 14,660 bacteriological tests, and 7,330 chemical tests. The average moisture content of butter for the year was 15.42 per cent., and the average salt content 1.33 per cent. Both of these represent an improvement on the previous year's figures of 15.33 per cent. and 1.24 per cent.

The hygienic quality of the butter showed a distinct improvement over the previous year. This is indicated clearly by the following comparison of the bacteriological quality indices for corresponding period of the two years:—

	Average Index.	
1st quarter—July-September, 1940 ..	222	= 34 per cent. improvement
1st quarter—July-September, 1941 ..	298	
2nd quarter—October-December, 1940	177	= 26 per cent. improvement
2nd quarter—October-December, 1941	224	
3rd quarter—January-March, 1941 ..	171	= 44 per cent. improvement
3rd quarter—January-March, 1942 ..	246	
4th quarter—April-June, 1941 ..	257	= 6 per cent. improvement
4th quarter—April-June, 1942 ..	272	

These results are gratifying, considering the many difficulties confronting farmers and factory managements at the present time. The butter from each factory was examined for bacteriological quality and chemical composition at regular intervals (approximately three weeks). Factories received prompt reports on results obtained, and a summarised quarterly report was forwarded to each manager.

Butter Factory Water Supplies.—Three hundred and one samples of water from 54 different factories throughout the State have been examined, since a plan was initiated early this year to assist factories to maintain a pure-water supply for butter washing purposes. This work has involved 2,100 different tests.

Butter Experimental Work.—Problems on which work has been performed have included tinning of butter, utilisation of second-grade butter, the microscopic structure of butter and its relation to butter working and keeping quality, and anti-oxidants in butter.

Cheese.

The distribution of starter cultures to cheese factories was continued. Commencing the year with four pure cultures, 12 other strains were imported from other Australian States and New Zealand. A new strain was also isolated in the laboratory. From all these the best six were selected and are now available. The purity and vitality of these starters are carefully tested weekly. The laboratory has thus rendered the cheese industry a valuable service, as the starter problem was one which required serious and urgent attention.

Brisbane Milk Supply.

The following number of tests were carried out on Brisbane milk supplied to depots controlled by the Brisbane Milk Board:—12,728 tests on 1,875 samples of pasteurised milk and 6,985 samples of raw milk.

Pig Branch.

A careful census of the pig industry covering the period to 31st March, 1942, while indicating excellent progress in breed and type improvement and in marketing facilities, also indicated a falling-off in production in a number of districts—in some to the extent of 30 per cent., in others to 20 per cent. Some districts showed definite improvement despite difficulties associated with man-power shortage, variation in seasons, and similar causes.

It seems probable that the falling-off in production is due primarily to instability of the price position, also to man-power and high-priced foods.

Expansion of the bacon, bacon rasher, and pork sausage canning trades has led to increased prices for mature sows and similar heavyweight pigs essential to the efficient canning of this type of meat. Consumer demand has largely increased, Defence Department requirements now absorbing a greater volume than was previously allocated to the United Kingdom markets. Interstate transactions in live pigs and pig meats have resulted in many thousands of pigs being purchased for other States that normally would have been treated here. In consequence, the price position has improved, but is subject to almost weekly fluctuations.

Foodstuffs used to balance milk in the feeding of pigs have been at prices much higher than normal, and this, together with extreme shortage of fencing and other building materials, has made progress difficult. The change over to cheese production of the milk from many farms has also had some effect.

The pig population remains around 430,000 head, with indications of improvement, as indicated by remarkably good demand for better quality breeding stock. Health of stock has been good and quality of the finished products satisfactory.

Pig raisers are co-operating wholeheartedly in the endeavour to retain production at a normal level, thus assisting in maintaining supplies and assisting the war effort.

E. B. RICE,
Director of Dairying.

REPORT OF THE DIRECTOR OF VETERINARY SERVICES

In addition to maintaining the organisation for the diagnosis, prevention, and control of animal disease, services of the veterinary staff have been directed to co-operate in the establishment and maintenance of emergency food supplies.

In general, the animal disease situation is satisfactory, there being no major occurrences of disease except the occurrence of stickfast flea on poultry in the Boonah district and the extension of buffalo fly infestation.

Animal Health Stations.

Having reached the retiring age, Mr. J. A. Rudd relinquished the directorship of the Animal Health Station, Yeerongpilly, and was succeeded by Dr. J. Legg.

Diagnostic services constitute an important phase of the stations' activities. A considerable amount of material was submitted by field officers for laboratory investigation.

The activities of the Animal Health Stations in the preparation and distribution of vaccines, etc., for prevention and treatment of disease covered a wide range of service.

Specific Diseases.

Tick Fever.—Outbreaks were reported from several centres. Tick fever produced by the organism *Babesiella argentinum* is by far the commonest and most severe form of the disease, piroplasmosis (*Piroplasma bigeminum*) being much less common. Two outbreaks of anaplasmosis were diagnosed, losses being comparatively slight.

Losses are not comparable with those of years ago, as a result of the success attending treatment with acaprin and similar drugs, pirevan and piroparv.

Because of the impossibility of importing acaprin for the treatment of tick fever, arrangements were made for the manufacture of this drug in Australia. Tests of the Australian product were highly satisfactory, and the position thus safeguarded.

Tests of pirevan and piroparv, both English preparations, showed them to be satisfactory for the treatment of tick fever in Queensland.

Cattle Tick.—For some time it has been evident that dipping for the control of cattle tick in certain areas has not had the desired effect, results suggesting that the parasite in those districts was harder to kill than in other districts.

To overcome this, some owners have charged the dips with very much larger quantities of arsenic than normally found necessary. Investigations have been commenced in North Queensland of the use of nicotine sulphate, which had been found helpful in Africa as an adjuvant to dips in similar circumstances. Results so far are promising.

Buffalo Fly Control.—One of the most outstanding problems during the year has been that of controlling the buffalo fly. The measures undertaken included the control of organised movement of infested stock, and cleansing of such stock by means of special spraying plants at the rail heads immediately prior to trucking. Two additional spraying plants were brought into operation during the year, one at Gilliat, the other at Mungana.

These measures were again successful in that the parasite was held back from the main fattening areas and dairying country of the eastern coast, even though stock from infested areas were continuously brought forward.

No successful methods are available to control the natural spread of the parasite, and the year under review has been the most critical in regard to this pest. After entering Queensland from the Northern Territory about fourteen years ago, the buffalo fly gradually spread round the coast of the Gulf of Carpentaria, and at the end of June, 1941, it had reached the Mitchell River, on the west coast of the Cape York Peninsula. This river extends to within thirty miles of the east coast, and carries a moderate population of cattle throughout its entire length; consequently it offered a favourable passage for the natural migration of the fly from the west to the east coast of the Cape York Peninsula. At the end of June, 1942, the fly had spread up the river and its tributaries to the westward of Mareeba, and had crossed the Great Dividing Range and reached the east coast near Cooktown. The migration was continuous throughout the year, conditions being very suitable for the propagation of the parasite.

Contagious Bovine Pleuro Pneumonia.—Outbreaks reported during the year numbered 41, but there is no doubt that many more outbreaks occurred, but were not detected or reported. A widespread outbreak occurred in the Gulf country, involving many properties, and probably more than 100,000 head of cattle. Details of losses could not be obtained, but the outbreak was quickly controlled by slaughter, quarantine, and inoculation. Control in such country, where mustering is never complete, is a difficult problem.

To ascertain the degree of immunity and severity of reaction following the use of the vaccine, questionnaires are sent out to all stockowners supplied with contagious bovine pleuro-pneumonia vaccine. The completed questionnaires are supplying valuable information on the efficiency of this product.

Tuberculosis.—In the past few years tuberculin testing of stock was rapidly extended, and was continued during the present year, largely as a result of the demand by stockowners for control of the disease in their herds, but also in part due to a demand by the public for provision of milk supplies free from danger from tuberculosis.

It is pleasing to be able to report that many of the larger towns in the Central West have now complete milk supplies from tuberculin tested herds.

Details of Tuberculin Tests during the year.—

Herds under Tubercle-free Herd Scheme.—Animals tested, 8,655; positive, 142; suspicious, 25; negative, 8,488.

Herds not under Tubercle-free Herd Scheme.—Animals tested, 26,901; positive, 2,026; suspicious, 69; negative, 24,806.

Contagious Abortion.—This disease continues to be one of the major problems of the dairying industry, particularly on the Darling Downs. Repeated testing at intervals of not more than 60 days and elimination of reactors will rapidly reduce the infection to small proportions, and eliminate the disease in time, even where initial infection is high. However, the present method of testing of isolated herds will never achieve anything more than individual relief with constant risk of re-infection.

The development of the rapid agglutination test, systematic testing in zones, and calfhood vaccination are subjects for contemplation and planning in more settled times.

Over 8,000 tests were carried out at the Animal Health Stations, a little more than 1 per cent. giving positive reactions. As many of these were repeat tests, the figures do not represent the degree of infection likely to be found in dairy herds.

Brucellosis (Contagious Abortion) of Swine.—A limited amount of testing for this disease was done, and four herds are being tested under the Brucellosis-free Herd Scheme, two being certified free. Whilst this disease may lead to serious breeding troubles on other occasions, it has been noted that the incidence, as determined by the agglutination test, is out of all proportion to the number clinically affected. Nevertheless, the disease is regarded seriously, and in view of the relative freedom of this State should be eradicated wherever encountered.

Mastitis.—This disease is prevalent in dairying districts. Improved hygiene and use of autogenous vaccines usually produce good results. Many cases have been treated with mammary infusions of acri-flavine. The results have not always been uniformly good, but have been satisfactory in selected cases. Careful and repeated treatments are necessary.

Blackleg.—Outbreaks of blackleg in bovines were widespread, those in North Queensland during the winter and spring of 1941 being the most serious recorded for more than 20 years. Further outbreaks occurred in the winter of 1942. The disease was satisfactorily controlled by vaccination.

Swine Paratyphoid.—This disease has been diagnosed on a number of occasions, and is not confined to any particular area of the State. The outbreaks may be quite sudden and associated with severe losses.

Tetanus.—Tetanus was diagnosed from material submitted following deaths in a flock of sheep on the Darling Downs, the entry of the organism through the skin being apparently brought about by grass seeds.

Mackenzie River Disease.—Further investigation into this disease was made. It appears to be confined to the brigalow-yellowwood scrubs and brigalow-blackbutt country, the marginal belt between the flooded brigalow and forest ridge zones on certain watersheds in well defined areas. Although most commonly seen in steers, cattle of all ages and of both sexes may be affected.

A further survey with the assistance of a botanist was made, and the disease was tracked down to a small paddock of 200 acres. Where practicable, owners are adopting recommended methods of animal management to avoid losses in paddocks of bad repute at the dangerous time of the year. This, together with the use of a suitable lick, is believed to assist considerably in reducing losses.

Mycotic Dermatitis.—This disease was diagnosed in cattle for the first time in this State. The disease has been described in calves in Victoria, but it would appear that its diagnosis from material submitted from cattle in the Mt. Perry district is the first record in adult cattle. These cases involved the loss of three beasts.

Sawfly Poisoning.—Some experiments were carried out in the Mitchell district to determine whether the fresh larvae taken from the tree (as opposed to the larvae which collect around the foot of the tree, and which are eaten frequently by cattle, often with fatal results) are toxic or otherwise. These tests, in which sheep were used, showed conclusively that larvae in all stages are definitely poisonous.

Ixodes Holocyclus.—It is known that *I. holocyclus* causes paralysis and death in young stock, but evidence has been brought forward recently to suggest that it may cause typical symptoms and even death in adult cattle.

St. George Cattle Disease.—A local name given to a disease of unknown cause which occurs in certain well-defined areas in South-western Queensland, making its appearance during the summer months only.

Observations and blood analyses were carried out on a typical case railed to Yeerongpilly. Further observations are required on this disease, which does not appear to be infectious, but may be due to a toxicity or a deficiency.

Parasites.

Sheep Parasites.—In co-operation with the Council for Scientific and Industrial Research, through the assistance of the Australian Wool Board, "refresher" schools of instruction for departmental officers were conducted at the McMaster Field Station, near Sydney. Four officers from this State attended. Two secondary schools were subsequently held, at Yeerongpilly and Blackall, under the direction of Dr. F. H. S. Roberts, D.Sc.

To bring the knowledge thus gained to graziers and others interested in sheep husbandry, demonstration schools were held at Blackall, Longreach, Winton, Julia Creek, Charleville, Roma, Hannaford, Goondiwindi, Dirranbandi, Emerald, and Clermont. The schools were a pronounced success.

Apart from blowfly strike internal parasites continue to be the main trouble in sheep. Field demonstrations in the most efficient methods of worm control proved of considerable value.

The sheep ked was recorded from the Townsville area and was eradicated.

Parasites of Pigs.—Parasitic conditions of pigs have been found to be common, the main external parasites being lice and mange.

Parasites of Poultry.—In September, 1941, some skin parasites on poultry were found to be the stickfast flea. This was the first occasion on which this parasite, a serious one of poultry in other States and parts of the world, had been found in Queensland. Measures were taken promptly to ascertain how far it had been spread and to prevent further spread.

A survey of the parasites of poultry covering the whole State has been completed.

Bacillary White Diarrhoea.—As a result of the testing carried out by officers of the Poultry Branch, who have had the assistance of a veterinary officer, this disease is becoming less prevalent in the Brisbane district.

Stallion Boards.

Stallion Boards operated in all the usual districts with the exception of the North Coast and far North Coast.

Poison Plants.

The Poison Plants Committee continued its work of feeding trials and chemical investigations of material suspected of being poisonous to stock. Of results obtained the following are worthy of mention:—

(*a*) *Chemical Investigations*—

(1) *Passiflora suberosa*, a Wild Passion Vine. Analysis confirmed that both leaves and fruits were cyanogenetic.

(2) *Cynodon dactylon*, probably var. *pulchellus*, one one of the Couch Grasses. Suspected of mortalities in sheep; analysis proved cyanogenetic.

(3) *Cynodon plectostachyum*, African Star Grass. Young leaves and young runner growth cyanogenetic.

(*b*) *Feeding Tests*—

(1) *Malvastrum spicatum*. For some years this plant has been suspected of causing "staggers" in sheep, but only recently has an opportunity presented itself for feeding trials. As a result of these trials the suspicions of toxicity were confirmed. Three lambs, fed exclusively on the chaffed plant, developed the typical symptoms of shivering attacks and rapid "knocking-up" when driven.

(2) *Solanum Seaforthianum*, a deadly Nightshade. Trials with both ripe and unripe fruits produced typical symptoms in sheep. The plant is apparently distasteful, and the plant unlikely to be eaten readily by stock.

(3) *Eremophila Latrobei.*—Fresh plant, residue from watery extract and alcoholic extract were found to cause death in sheep and goats.

Publications.

Several scientific papers, based on results of research work and field investigations by members of the staff, were published in the course of the year.

In addition, veterinary notes were contributed regularly to *The Queensland Agricultural Journal.*

To meet the need for information on poultry management and disease, a comprehensive publication, which will be included in *The Queensland Agricultural and Pastoral Handbook Series,* was prepared by the Poultry Expert and Mr. L. G. Newton, B.V.Sc., in collaboration, and with the assistance of the staff of the Veterinary School and the Agricultural Chemist. This was issued serially in *The Queensland Agricultural Journal* until publication of that periodical was suspended.

H. R. SEDDON,
Director of Veterinary Services.

REPORT OF THE CHIEF INSPECTOR OF STOCK.

The early part of the period under review was dry in the grazing districts, but conditions improved after storm rains in November and December. Useful falls were not general until late autumn. Monsoonal rains in the northern pastoral districts were disappointing; although, generally, autumn falls stimulated herbage growth they were insufficient to restore water supplies, the lack of which is being felt along some of the north-western stock routes:—

Preliminary figures of live stock in the State on the 1st January, 1942, are:—Horses, 460,000; cattle, 6,400,000; sheep, 25,500,000; pigs, 380,000.

There has been a gradual increase in fat stock values during the year, and the demand for fats has been constant. Pig values remained on a par with those of the previous year. There has been a good demand also for store stock.

Again, an increase is shown in the volume of interstate stock movements.

There has been a further spread of the buffalo fly in the Cairns-Cook district, necessitating much patrol and inspection work. An additional restricted area has been gazetted, and a further spray plant has been erected at Mungana.

Tick Cleansing Areas.

Further depletions in the staff have made cleansing operations difficult, and there have been no additions to the present cleansing areas. Spasmodic outbreaks of ticks have occurred in clean areas, but these have been placed quickly under control. As the latter half of the year was very favourable for ticks, it is considered that, in the circumstances, the fact that the boundaries of the areas have been held intact can be viewed with satisfaction.

Recent action by this Department resulted in agreement by the New South Wales authorities to placing an area of approximately 850,000 acres in the South Burnett district in Schedule T, with a consequent easing of restrictions on stock in that district travelling to New South Wales. This is fully appreciated by stockowners, and is some recompense for their co-operation in tick-control work.

Quarantine.

There were 44 quarantines imposed because of contagious pleuro pneumonia. It has been found necessary to institute 24 prosecutions under *The Diseases in Stock Acts*, and convictions have been obtained in each case.

Slaughtering Legislation.

Increased supervision became necessary in the administration of *The Slaughtering Act and Regulations*, particularly in many country centres. Many slaughter yards have been taxed to full killing capacity, and shortage of labour has added to the difficulties. The importance of hygiene and the combating of the fly and other pests, with their bearing on disease control, has been strongly stressed.

Seven new butcher shops and 10 new slaughter houses were erected within the State. Nine prosecutions were instituted and convictions obtained in each case.

Brisbane Abattoir Area.

Inspectional supervision has been maintained over the butcher shops and vehicles in the metropolitan area, and the standard of cleanliness is satisfactory.

Restrictions on the delivery of meat have reduced considerably the number of vehicles thus engaged, as well as eliminating the cash cutting cart method of delivery.

A watch has been kept for illegal slaughter, several cases being investigated and proceedings instituted.

Bacon Factories.

The total number of pigs treated at bacon factories was 406,051, as compared with 457,012 in 1940-41 and 429,498 in 1939-40. The export total showed a sharp drop to 39,882, as compared with 130,322 in 1940-41 and 110,127 in 1939-40.

In addition, 38,397 cattle and 13,734 calves were slaughtered at bacon factories. There has been a considerable increase in the number of cattle treated at these works for canning.

Condemnations for tuberculosis numbered 3,193 carcases and 14,749 heads. In 1940-41 the figures were 3,108 and 21,930 respectively.

Follow-up work in the field is still being undertaken, but limitations brought about by war conditions have had a restricting influence on the amount of tuberculin testing carried out in tracing the incidence of T.B. in pigs.

Summary of Stock Slaughtered.

The following is a summary of all stock slaughtered throughout the State for home consumption. It is exclusive of stock killed for export purposes and those killed on farms and stations for private consumption:—

Inspection.	Bullocks.	Cows.	Calves.	Sheep.	Swine.
Bacon Factories..	5,250	33,147	13,734	..	366,169
Brisbane Abattoir	47,048	76,689	99,350	581,145	51,858
Departmental Inspectors	47,429	90,024	28,282	322,121	54,118
Police—Acting Inspectors	26,749	41,778	7,710	87,345	18,364
Totals ..	126,476	241,638	149,076	990,611	490,509

L. D. CAREY,
Chief Inspector of Stock.

REPORT OF THE SENIOR INSTRUCTOR IN SHEEP AND WOOL.

A fair spring, useful summer rains, autumn floods, and a mild winter were the main weather experiences in the pastoral districts. The south-western country, from Goondiwindi westwards, and northwards, received little beneficial rainfall during the greater part of the year. Further out, however, flood waters spread widely over the flat country, causing a vigorous growth of grass and herbage, and so bringing relief to areas where no rain had been registered. More recently, further useful falls extended over a vast area, including the dry south-western belt. The mild conditions since prevailing have assisted in maintaining free growth of grass and herbage. Pastures generally are now in fair to good condition.

Lambing percentages, especially in the Central, Central West, and North-western Districts have been well maintained. Health of the flocks generally has improved. Worm infestation was less serious. No serious waves of blowfly strike developed. The spread of lice was less pronounced, and control methods were more generally practised.

Registered Studs.—Merino sheep in registered studs are increasing steadily in number, while the quality and type are showing a definite improvement. Besides Merino breeding establishments, Corriedale, Border Leicester, Romney Marsh, Dorset Horn, and Southdown registered studs are producing stock well up to standard.

Fat sheep were in from fair to good supply throughout the year, while values varied in keeping with number and quality. Prime quality wethers realised from 3d. to 5d. per lb. estimated dressed weight, plus skin value. When numbers in excess of market requirements were yarded, poor quality sheep were difficult to quit at low values.

Fat lambs maintained good values throughout the year. Numbers in excess of requirements caused, at times, low values for lambs lacking condition. Top prices at the best sales reached 1s. per lb. dressed weight, plus skin values.

Store sheep sales were sluggish throughout the year, because of adverse seasonal conditions in some districts. Most holdings, however, are stocked to full capacity, and consequently, there is a general desire to reduce numbers as a safeguard against a dry winter and spring, and to make room for the coming crop of lambs. Beneficial and widespread rains in May and the mild conditions which prevailed afterwards relieved the situation to a large extent, but overstocking is developing into a real problem.

Field Work.—Instruction in sheep and wool classing formed an important section of the field work in the course of the year. The Fat Lamb Scheme has continued in useful operation. More lambs are now produced and marketed at an earlier age. The percentage of prime lambs of good type has increased.

The Darling Downs district is still the chief lamb-raising region, although good lambs have been raised near the coast. Coastal trials favoured the Romney Marsh both in the southern and northern (Atherton Tableland) districts, much depending on the personal equation.

Wool Production.—Wool production was satisfactory. Appraisals aggregated 618,583 bales. Under the Departmental Farmers' Wool Scheme, 680 bales were appraised. Much of the wool was very mixed, and, considering the various breeds, types, and colours represented, satisfactory prices were obtained as a result of the thorough system of classing.

JAS. CAREW,
Senior Instructor in Sheep and Wool.

REPORT OF THE POULTRY EXPERT.

Production.—During the year ending 30th June, 1942, the Queensland Egg Board received from producers the largest number of eggs received in one year by that organisation, exceeding the previous year by 13 per cent. Expansion of the industry was general throughout Queensland.

Export.—With an increased production increased export was necessary. Export of eggs in shell to the extent of 2,377,350 dozen eggs and as pulp 128,488 dozen was made. This also creates an export record for this State.

Egg Quality and Values.—Egg quality was maintained; in fact, it is considered there was less complaint as to quality on the local market than in any previous year. Values during the early part of the financial year were on a level with previous years, and those at the end of the year slightly higher.

Fodder.—Although maize has been somewhat dearer than is usually the case, and bran and pollard difficult at times to obtain, feeding and production costs have been kept within reasonable limits. Wheat is now in more extensive use as fowl feed.

Registered Hatcheries.—The voluntary registration of hatcheries has declined slightly. Blood testing work was continued in co-operation with hatchery owners.

Table Poultry.—The market for table poultry has been erratic, but during the closing period of the year values were exceptionally good. This will lead to the rearing of many of the cockerels that would probably be destroyed under normal conditions.

Prospects.—Early indications that the usual flock replacements would not be made have given way to greater confidence. Hatchery owners report good bookings for the coming season. Production, therefore, should be well maintained.

P. RUMBALL, Poultry Expert.

REPORT OF THE REGISTRAR OF BRANDS.

DETAILS OF REGISTRATIONS, TRANSFERS, &C., FOR YEAR 1941-42.

——	Number.	Fees Received.	Number since Inception of Legislation.
		£ s. d.	
Three-piece brands registered ..	591	591 0 0	89,619
Cancelled brands reallotted ..	94	282 0 0	7,317
Symbol brands registered ..	25	187 10 0	1,751
Cattle earmarks registered ..	385	385 0 0	29,371
Brands transferred	1,311	655 10 0	60,320
Sheep brands and earmarks registered	129	72 15 0	13,156
Sheep brands and earmarks transferred	145	36 5 0	6,925
Distinctive brands registered ..	12	No fee	..
Alteration of address of brands ..	2,376	No fee	..
Brands cancelled	8	No fee	..
Earmarks cancelled	93	No fee	..
Total	..	£2,210 0 0	..

The figures show a slight increase in the number of horse and cattle brands and cattle earmarks registered,, compared with last year, and a small falling-off in regard to transfers and sheep brands and earmarks registrations. The checking of brands returns made by owners show that a large numbered altered their address without notifying this department.

Over 2,300 addresses have been corrected in connection with the first three series of brands, and it is probable that a large number will require altering in the remaining three series. In their own interests, owners should notify promptly any alteration of address for their brands or earmarks.

H. S. ILIFF, Registrar of Brands.

REPORT OF THE VETERINARY SURGEONS' BOARD.

The Board approved of the registration of four veterinary surgeons during the year, and five meetings were held.

Since the Act came into force in 1937, 125 registrations have been effected. These included 40 members, who held diplomas or degrees in veterinary science, 50 with diplomas from approved agricultural colleges, and 35 registered under Section 18 (1) (iii.) of the Act.

Eight names have been removed from the Register, two for failing to pay roll fees, three because of removal from the State, and three because of death, one of whom (Flight Lieut. Nelson P. Reid) lost his life while on active service in the R.A.A.F.

There are now 117 names on the roll. Of these 22 have joined either the military or air forces.

Action was taken during the year in connection with numerous cases of infringement of the Act.

H. S. ILIFF, Registrar.

REPORT OF THE AGRICULTURAL CHEMIST.

In the year's operations, work relating to war problems has replaced much of what was formerly routine.

The December complication in international relations brought in its train difficulties in industry and agriculture, which have provided those of the staff who are ineligible for active service with abundant scope for their training and experience.

For obvious reasons the details of analyses performed and equipment tested are excluded, but the numbers, 8,387 and 5,842 respectively, indicate a busy year for a reduced staff.

Mr. E. H. Gurney, former head of the Branch, has retired under the age limit regulations.

MONTGOMERY WHITE, Agricultural Chemist.

REPORT OF SEEDS, FERTILIZERS, VETERINARY MEDICINES, PEST DESTROYERS, AND STOCK FOODS INVESTIGATION BRANCH.

In the course of the year, 4,191 samples were examined, as compared with 7,414 in the previous year. Licenses issued numbered 628, being 42 fewer than the 1941 issue. Registrations totalled 811, as against 1,042 for the preceding period. Analyses by the Agricultural Chemist numbered 161, compared with 422 for the previous term. Board meetings decreased from 35 to 16.

Seeds for Sowing.—Because of a shortage of vegetable seeds for sowing the germination standard was revised to some extent. Because of faulty germination, 1,030 lb. of vegetable seeds were destroyed; 720 lb. were seized; 134 bags of farm seeds were compulsorily cleaned under supervision; 107 bags of farm seeds below standard were rendered unsaleable for sowing.

Dodder in lucerne seed and Datura in Sudan grass and Japanese millet were again the most injurious weeds found. Considerable success in testing a method of separating dodder seeds from lucerne seed has been reported. Effective action was taken when necessary to ensure that growers are supplied with seeds of a quality conducive to maximum results for the labour involved.

Amending legislation passed in the course of the last Session of Parliament now provides for seed certification

Fertilizers.—Registrations of fertilizers numbered 300; and licenses issued totalled 209, a decrease of 21.

The number of licensed fertilizer dealers decreased by 21, an insignificant figure in view of all the circumstances arising out of the war.

Rationing of fertilizer has been extended to cover all fertilizers sold in this State as from 1st February, 1942.

Veterinary Medicines.—Registrations numbered 116, and 224 were reviewed, making a total of 340, against 736 during the first six months of the 1939-41 period.

All applications for registration are subjected to critical review, resulting in a very high proportion requiring amendments to labels and advertising matter. Registrations, numbering 17, have been refused on various grounds, representing 5 per cent. of the number reviewed in the course of the registration period.

Pest Destroyers.—As pest destroyers are registered for a three-year period and 1942 is the final year in the period, the small number of samples received (43) was expected. The same reason accounts for the small number of registrations (90).

Stock Foods.—Registrations totalled 305, a decrease of 27. The number of samples of stock foods analysed by the Agricultural Chemist amounted to 29, as compared with 64 during 1941. It is no longer the practice to analyse samples for labelling purposes by private dealers, hence the decline in the number submitted, as compared with the number submitted in previous years

F. B. COLEMAN, Officer in Charge.

REPORT OF THE EDITOR OF PUBLICATIONS.

Throughout the year, the Publications Branch maintained an extensive informational service by means of departmental publications, regular newspaper contributions, radio broadcasting, and lectures to various societies.

With its December issue, *The Queensland Agricultural Journal* suspended publication for the duration of the war. The *Journal*, which was established in July, 1897, had entered on its 45th year of continuous publication. In the course of its long life it had fulfilled all the hopes and verified the predictions of its founders, which were expressed in its initial number, as to the value of its service to the primary industries of Queensland and its influence on their progress. At the time of its suspension, the aggregate annual distribution of the *Journal* approximated 112,000 copies.

The Weekly News Bulletin, now in its seventh year, continued to supply a regular press service to every newspaper in the State. Through the *Bulletin*, practical notes of seasonal and educational interest and recommendations of specific remedies and their application are made available in the form of topical agricultural news. The valued co-operation of the country and metropolitan Press in reprinting its contents ensures its usefulness.

In addition to the weekly press service, numerous special articles on agricultural progress and related subjects were supplied for publication. The services of the Branch also were extended to newspaper contributors and other writers requiring authoritative information on the development of rural industry in Queensland. Other information on the general agricultural situation, from time to time, was prepared and circulated through appropriate channels.

In co-operation with the Army Education Service, courses of lectures on rural subjects, by officers of the Department, were arranged for troops in military encampments.

The bulletin service of the Department supplies a constant demand for literature on the land industries of Queensland. Important additions were made to the bulletin, pamphlet and advisory leaflet series of publications in the course of the year. An aggregate of, approximately, 105,000 copies of these publications was made available for general distribution. To stimulate a more intensive production of food crops as a measure against possible emergency, either local or general, a special series of booklets was published and widely circulated.

A notable addition to *The Queensland Agricultural and Pastoral Handbook* series was made by the publication of *Vol I.—Farm Crops and Pastures.* This volume, which was the subject of favourable review, has been accepted as a timely compilation of practical information for the guidance of farmers, extension workers and students. It deals comprehensively with the most important farm crops cultivated in Queensland, giving special attention to the sorghums, cotton, tobacco, the tropical legumes and grasses. The volume is liberally illustrated with excellent photography of recent date. Other notable features of this volume are the chapters on pastures and their management, winter fodder crops, fodder conservation and weeds.

Other volumes of the *Handbook Series* already published are *Vol. II—Horticulture in Queensland, Vol. III—Insect Pests and Plant Diseases and Their Control, and Vol. IV—Sugar Cane and Its Culture. Vol. V—Poultry Raising in Queensland* is in course of publication in parts which, later, will be incorporated in a complete volume.

In co-operation with the Australian Broadcasting Commission, radio talks on rural topics through the national and associated regional stations were contributed regularly to *The Countryman's Session.*

The Photographic Section also had a busy year. Its services were made available, as required, to other Government Departments. The demand for prints, process blocks and lantern slides for public lectures remains constant. Film reels of station and farm life and industry also were made available as required.

Many important additions have been made to the central library, largely through the exchange service built up in past years with other countries. Through the circulation of monthly accession lists, all concerned are kept informed of the availability of the most recent literature relating to the land and its industries. Sectional libraries within the Department have been well maintained.

JOHN REID,
Editor of Publications.

REPORT OF THE DIRECTOR OF MARKETING.

In accordance with the requirements of *The Primary Producers' Organisation and Marketing Acts*, 1926 *to* 1941, I have the honour to submit herewith my Annual Report for the year ended 30th June, 1942.

The State marketing boards, which were in existence in Queensland for the marketing of wheat and barley prior to the acquisition of these commodities by the Commonwealth Government after the outbreak of war, have continued in being, functioning as sole licensed receivers and administrative branches of the Australian Wheat and Barley Boards. In respect of other agricultural commodities of which the Commonwealth Government has instituted partial control—e.g., butter, cheese, and eggs, the State marketing boards concerned have assisted the Commonwealth authorities, in co-operation with the Minister for Agriculture and Stock, in administering the schemes of control imposed under the *National Security Act.*

In addition, the Council of Agriculture, the central deliberative body representative of the primary industries organised under the State's marketing legislation, has made its Secretary and staff available to assist in administering the Commonwealth Potato Control Plan, and to perform secretarial work associated with investigation of the dairying industry throughout Australia on behalf of the Commonwealth Government. The Committee of Direction of Fruit Marketing has accepted the very onerous duty of acting as the buying authority of the vegetable and fruit requirements of the Australian and Allied forces in Queensland and Papua.

The marketing boards, the activities of which are hereinafter reviewed and which are producer-controlled, with the Director of Marketing having *ex officio* membership as the Government representative, operate, unless otherwise indicated, under "*The Primary Producers' Organisation and Marketing Acts*, 1926 *to* 1941."

ARROWROOT BOARD.

The Board has an indefinite term and functions in respect of both arrowroot bulbs and arrowroot flour.

1941 Crop.—Deliveries of arrowroot bulbs to the Board from the 1941 crop were approximately 6,452 tons. Where mills are not equipped with weighbridges, growers are credited for bulbs delivered by them on the basis of 10 tons of bulbs for each ton of flour manufactured. The whole of the resultant yield of 645 tons of flour has been sold, but buyers have yet to take delivery of a small quantity in accordance with their forward contracts with the Board. A large quantity of arrowroot flour was milled and disposed of under interstate contracts independent of the Board's control.

A first advance of 30s. per ton has been paid to growers on bulbs delivered to the Board, while millers have been paid £10 of the £13 per ton of flour, which it is anticipated will be their remuneration as millers.

1942 Crop.—It is anticipated that a normal yield of 1,000 tons to 1,200 tons of arrowroot flour will be obtained this season. War requirements of this commodity, however, call for double this production, and the industry, following on a recent conference between the Minister, the Board, and the arrowroot millers, will endeavour to bring about the desired increase commencing with the 1943 crop.

The success of this planned production programme is dependent, however, upon the requisite manpower being made available, and growers and millers being assured of financial

returns which will meet production and manufacturing costs. The necessary representations in this regard have been made to the Commonwealth Government.

ATHERTON TABLELAND MAIZE BOARD.

The operations of the Board were extended without opposition for a further period of twelve years, until 30th June, 1955.

1940-41 Season.—In addition to the payments mentioned in my last annual report, aggregating £5 10s. per ton, two further advances of 10s. and 9s. 6d. per ton respectively were paid to growers, making the total payment £6 9s. 6d. per ton for the season.

1941-42 Season—

	Tons.	Tons.	Tons.
Maize delivered—			
Southern maize purchases		..	135
Gross delivered by growers		16,529	
Less returned to growers	161		
Less moisture over 14 per cent.	488		
		649	
			15,880
			16,015
Maize despatches—			
Sales of maize	15,095		
Sales of offal	228		
		15,323	
Less weight of bags		182	
		15,141	
Stock on hand		765	
			15,906
Net under-run		..	109

The under-run of 109 tons represents .66 per cent. of the total delivery, compared with 2.3 per cent. the previous year.

Marketing.—Sales for the 1941-42 season, excluding amounts resold to growers, £1,936 7s. 4d., amounted to £119,946 18s. 3d. This total does not include sales of pig, poultry, and cattle foods, but includes the value of maize used in these preparations.

A first advance of £4 per ton was made to growers for maize delivered to the Board containing 3 per cent. dead grain, with premiums and dockages according to quality. Two further advances of 10s. per ton each were paid before the end of June.

BARLEY BOARD.

Malting barley grown in Australia was again subject to acquisition by the Commonwealth Government under the *National Security Act*, and the Queensland Barley Board continued to act as the sole licensed receiver in this State for the Australian Barley Board.

1940-41 Season.—A third advance was paid by the Australian Barley Board in August, 1941, at the rate of 6d. per bushel for all grades. During November a fourth advance was paid at the rate of 6d. per bushel for all grades of Chevalier, and 5d. per bushel on Cape Malting. With the payment of a fifth advance in March, 1942, at the rate of 1½d. per bushel for each of the abovementioned grades, the total payments per bushel to growers to date, less freight from growers' station to receiving depot, amount to 4s. 5½d. for No. 1 Chevalier, 3s. 11½d for No. 2 Chevalier, 3s. 4½d. for feed Chevalier, and 3s. 10½d. for Cape Malting.

In addition to the advances enumerated above, a further distribution at the rate of 4d. per bushel has been made by the Queensland Barley Board on all barley delivered, representing a distribution of profits on the Board's malting activities.

1941-42 Season.—Drought conditions were responsible for the small intake which amounted to 24,819 bushels and was classified as follows:—No. 1 Chevalier, 4,912 bushels; No. 2 Chevalier, 9,258 bushels; feed Chevalier, 8,259 bushels; Cape Malting, 2,206 bushels; feed Cape, 184 bushels.

Two advances have been made by the Australian Barley Board to date, the first, less freight from growers' station to receiving depot, being at the rate of 2s. per bushel for No. 1 Chevalier, 1s. 6d. for No 2 Chevalier, 11d. for feed Chevalier, 1s. 5d. for Cape Malting, and 9d. for feed Cape.

The second advance was paid in April, 1942, at the rate of 2d. per bushel on No. 1 and No. 2 Chevalier and Cape Malting barley, and 5d. for feed quality of both varieties.

The Board's malting activities have been suspended, and the whole of the intake has been disposed of for feed and pearling purposes.

During the year the operations of the Queensland Barley Board were extended without opposition for a further period of six years until 23rd April, 1948.

BROOM MILLET BOARD.

The Board is empowered to function to 31st October, 1943.

1940-41 Season.—Deliveries to the Board totalled 98 tons 11 cwt. 3 qr. of broom millet which realised £3,631 14s. 9d., or an average of £36 16s. 8d. per ton.

The maximum and minimum prices obtained were £62 10s. and £20 per ton respectively. As the crop was insufficient to meet the needs of local manufacturers, the latter were obliged to obtain the balance of their requirements from the Southern States.

1941-42 Season.—As returns from growers indicated that the crop would be small, the Board decided that full control should not be exercised during this season. To date 28 tons 5 cwt. 1 qr. 8 lb. of broom millet have been received, the realisations on which amounted to £1,572 11s. 3d. or an average of £55 12s. 9d. per ton. The maximum selling price was at the rate of £62 10s. per ton, and the minimum £35.

BUTTER BOARD.

The operations of the Board were extended without opposition for a further period of three years, until 31st December, 1944.

Production.—The drought conditions in the early part of the season, expansion of cheese production, and calls on labour and equipment which followed the changed war situation, all assisted to bring about a further decline in production which, since the peak year of 1938-39 when 2,756,657 boxes were produced, has dropped to 2,090,677 boxes for the year ended 30th June, 1941, and 1,708,311 boxes for the year under review.

Sales.—As with other commodities produced in excess of normal domestic requirements, a redistribution of market outlets has occurred as a result of war conditions. Sales to Great Britain during the year represented less than 65 per cent. of the sales outside the State, as compared with over 93 per cent in the peak year of 1938-39, and approximately 84 per cent. during the year ended 30th June, 1941. The total quantity sold for the year was 1,686,577 boxes, of which 558,812 boxes were sold in Queensland, 277,234 boxes to other States, making a total within the Commonwealth of 836,046 boxes, plus exports of 850,531 boxes, including 727,121 boxes to Great Britain.

Consumption.—After taking into account border imports, it has been estimated that the consumption of butter in Queensland was approximately 570,812 boxes, representing an increase of about 10,812 boxes as compared with the previous year. Since 1925-26, the initial year of the Board's operation, consumption has risen from 401,806 boxes.

Values Returned to Manufacturers.—The total net value of the 1,686,577 boxes sold during the year was £6,113,294 19s. 2d. The net prices returned to factories on the basis of equalization figures show a net value per box of £3.62467587, or approximately 1s. 3.53d. per lb., compared with 1s. 3.34d. per lb. approximately for the previous year. The values given represent net returns at agents' floors, Queensland ports of shipment, or other recognised centres of distribution, and only local transport charges require to be deducted to establish net returns to manufacturers.

Extension of Activities.—During the year the Board installed a plant for the dehydration of butter to meet Britain's request for this type of product. This activity has not only met a British need, but has permitted of the marketing of inferior grades of butter at comparatively reasonable prices. The extracted dry butter fat is shipped as ordinary cargo, thus saving valuable refrigerated space for other purposes.

The Board has also engaged in the packing of large quantities of tinned butter for Australian and Allied Forces overseas.

Marketing Control in Brisbane.—Control of the marketing of butter in the Brisbane area has been exercised satisfactorily and the Board's operations at Hamilton have been responsible for increasing the return to Queensland dairymen by £46,063 18s. 1d.

Butter Improvement Service.—The free service to the factories was continued, in co-operation with the Department of Agriculture and Stock, and provided assistance to a large number of factories during the year. The Board has recorded a pronounced improvement in the hygienic quality of the butter compared with the previous twelve months and the production of a butter of better economic composition.

Marketing Under War Contracts.—At the beginning of the year the British Ministry of Food indicated that there would be a substantial reduction in the tonnage of butter that would be purchased for the 1941-42 season, and ultimately the allocation for Australia was fixed at 57,000 tons as compared with 100,000 tons provided for in the previous year. The same values obtained as in 1940-41, but the contract provided for the purchase only of butter of choicest and first-grade quality. The decision of the British Ministry of Food to purchase a greatly increased quantity of cheese provided an opportunity to reduce the anticipated surplus butter production by a major change over from butter to cheese production, and plans to that end were implemented. There remained, however, the problem of the disposal of second grade and pastry butters. These were subsequently acquired by the Commonwealth Government, and regulations were issued empowering the Government, *inter alia*, to forbid the manufacture of the lower grades. The processing of inferior grades of butter

into dry butter fat at the dehydration plant operated by the Queensland Butter Board at Hamilton was undertaken following an indication that the British Ministry of Food would purchase as much as could be produced. Towards the end of the year, the loss of territories formerly supplying vegetable fats to Great Britain caused a revision of butter requirements, and it was indicated that the export of greater quantities, up to 70,000 tons, of choicest and first-grade butter from Australia to the United Kingdom was desirable.

Butter Prices.—Early in March, the Commonwealth Prices Commissioner announced an increase of 1d. per lb. in the retail price of butter of which ½d. was allowed as distribution costs to the retailer, thus increasing the basic wholesale price on the Australian market by ¾d. to 1s. 5¾d. per lb. This decision was in relation to an application for a price increase made in October, 1941, which was at first rejected.

CANARY SEED BOARD.

The Board is empowered to function to 30th June, 1943.

1938-39 Season.—The winding up of this pool has been delayed owing to the repurchase by the Board of 375 tons of canary seed. The whole of the seed has been sold, but a quantity has yet to be taken delivery of by clients against forward contracts.

1939-40 Season.—An interim advance at the rate of £4 per ton was paid by the Board to growers in December, 1941, making a total of £12 per ton to date. The Board still has on hand, unsold, a quantity of seed from this season's intake.

1940-41 Season.—Deliveries totalled 27 tons of canary seed, none of which has been sold to date.

1941-42 Season.—Plantings were again very light, and, owing to drought conditions, many crops failed or were fed off. No seed from this harvest was delivered to the Board, but it is evident that a quantity of seed was sold direct by growers to buyers.

Selling Prices.—Since 30th June, 1941, when quotations were on the basis of £18 10s. per ton f.o.b. Brisbane, prices have been on the up grade, and advanced to £35 per ton. Seed is at present being quoted at £31 per ton f.o.b. Brisbane, the maximum price fixed early this year by the Commonwealth Prices Commissioner.

CHEESE BOARD.

The operations of the Board were extended without opposition for a further period of three years until 31st December, 1944.

Production.—Although the drought conditions of the early part of the season adversely affected cheese production, efforts made during the year to secure an increased output succeeded to the extent that the quantity of cheese produced reached 16,350,560 lb. (7,299 tons), compared with 11,736,848 lb. for the previous year, and constituted a record for the State. The cheese manufactured was, as is usual, mainly of the cheddar variety, with 35,413 lb. of Gruyere and 285,225 lb. of other fancy varieties. The approximate value of the cheese produced in Queensland was £602,539.

Disposals and Values.—Owing to war conditions, shortage of cheese in New South Wales, and a substantial increase in the packing of tinned cheese by processors for supply to the Armed Forces, the distribution of sales differed from that of previous years. Of the total quantity of 14,596,052 lb. sold during the year ended 30th June, 1942, sales on the local market amounted to 4,891,061 lb., sales to processors 4,874,654 lb., and to overseas markets 4,830,337 lb.

The net average equalisation prices per lb. for all sales made by the States operating under the Equalisation Plan for the period July, 1941, to February, 1942, was 8·751d. per lb. As from 1st March equalisation of prices over a period based on the seasons has been substituted for the previous monthly pooling system. The interim equalisation value for the period March to June, 1942, has been fixed at 9·643d. per lb. This figure will be subject to adjustment when final data is available.

Prices.—An increase in the wholesale and retail price of cheese of 1½d. per lb., except for cheese sold as proprietary lines, was declared by the Commonwealth Prices Commissioner as from 6th March, 1942, following on a renewal of representations first made by the dairying industry representatives in October, 1941.

Administrative Levy.—Collections for administrative purposes were levied at the rate of 2½d. per cwt. of cheese manufactured.

Marketing under War Contracts.—As was forecast in the report for the previous year the contract between the Australian Government and the British Ministry of Food for 1941-42 provided for an increase from 20,000 to 40,000 tons in the quantity of cheese. Contract prices were increased by 7s. 2½d. per cwt. Australian currency for choicest and first grade, with corresponding marginal differences operating in respect of second and third grades, making the new prices, expressed in f.o.b. values, Australian currency, as follows:—

Choicest and first grade, per cwt., 83s. 9d.; second grade, 81s. 3d.; third grade, 78s. 9d.

Early action was taken in this State to increase the output of cheese and to effect a major change-over from butter to cheese production. However, owing partly to the effects of drought and partly to the unexpected demand for cheese within Australia, especially for processing purposes, the quantity shipped from Queensland to the United Kingdom under the British Ministry of Food contract was only 4,390 crates (approximately 313½ tons) of cheddar cheese, as compared with 13,437 crates (approximately 960 tons) for the previous year.

With the exception of a small quantity of cheddar sent to destinations other than the United Kingdom, the balance of the cheese exported overseas was sold to processors and shipped in processed form.

COTTON BOARD.

The Board is empowered to function to 31st December, 1946.

1940-41 Season.—An area of 57,454 acres was planted by 3,363 growers, as compared with 41,530 acres planted by 2,413 growers in the previous season. Seed sufficient to plant 74,000 acres was distributed to 4,127 growers, but because of the absence of general spring rains during the months of September and October, many growers were unable to plant.

The total production for the season was 15,869,159 lb. of seed cotton, which produced 5,631,374 lb. of raw cotton lint, equivalent to 11,437 bales of raw cotton. The average lint percentage for the whole crop was 35·486—the highest lint percentage ever recorded in Queensland. The whole of the crop was sold to Australian spinners and manufacturers.

Payments totalling £293,402 1s. 9d. were made to growers, representing an average net return covering all grades of cotton of 12·5065d. per lb. of raw cotton lint, equivalent to 4·437d. per lb. of seed cotton. Included in this amount was a sum of £17,670 9s. 9d., representing payment to growers at the rate of £4 per ton for 8,895,474 lb. of cotton seed contained in their seed cotton, together with amounts paid to growers during the period as a result of profits from the Board's oil mill. The total payments also included Commonwealth bounty at the rate of 3·15d. per lb. of raw cotton lint, representing £73,836 6s.

Revolving Fund.—A sum of £4,185 19s. 11d. was deducted from the final payment to growers and placed to their credit in the working account reserve revolving fund. This represented a deduction of ·18d. per lb. of raw cotton lint. A sum of £2,978 11s. 5d. was withdrawn from the fund and returned to growers of the 1931 and 1933 seasons.

1941-42 Season.—As a result of an intensive campaign to increase cotton production in order to meet Australia's urgent requirements for raw cotton, cotton seed was distributed in Central and South Queensland to 4,900 growers, sufficient to plant 70,000 acres, but because of extremely dry conditions in South Queensland during the spring plant months only 46,000 acres were planted and brought to harvest by 3,200 growers.

In addition to this planting in the main cotton belt, about 6,500 acres of cotton have or will be planted in North Queensland, principally in the Lower Burdekin Valley.

In the main cotton areas, considerable damage and loss has resulted from delay in the harvesting of crops because of the shortage of labour, and cotton has come to hand very slowly at both the Whinstanes and Rockhampton ginneries. Up to 30th June, 1942, the ginneries had received 6,854,485 lb. of seed cotton, from which 1,980,731 lb. of raw cotton had been ginned, equivalent to 4,555 bales.

It is with regret that the death, on 2nd June, 1942, is recorded of Mr. J. A. Peach, growers' representative on the Board for District No. 6 since 15th December, 1939.

EGG BOARD.

The Board is empowered to function to 31st December, 1944.

Supplies.—Quantities of eggs received during the 12 months ended 27th June, 1942, are as follows, the figures for the previous year being shown in parentheses:—Board floors, 5,376,189 dozen (4,614,987 dozen); agents, 1,667,861 dozen (1,600,760 dozen); total, 7,044,050 dozen (6,215,747 dozen).

The average net price returned to growers for all grades of eggs delivered during the year was 12.42d. per dozen. In addition to this price growers will be entitled to share in a distribution of surplus funds at a rate to be determined. The average price for the previous year was 13.17d. per dozen, including a pro rata payment of .55d. per dozen distributed from surplus funds from export.

Because of heavy Army purchases, supplies during the low production months of April, May, and June were insufficient to meet ordinary civilian requirements, and the

Board was compelled to limit purchases by its customers. This created an anomalous position, inasmuch as those who purchased their requirements from storekeeper clients of the Board had their supplies curtailed, whilst many of those obtaining their eggs, either directly or indirectly, from producer agents or from producers outside the control of the Board, received their full requirements. The Board is hopeful that, as a result of certain action which it has taken, a more equitable distribution will be assured in future.

Export.—The contract with the British Ministry of Food for the export of eggs to the United Kingdom resulted in an average net return to the Board of 12.689d. per dozen. Eggs-in-shell were accepted for export to the 31st December only. After that date exportable eggs were accepted as liquid frozen eggs, but because of increased local demand the Board had only a small quantity of eggs available for export in this form.

The difficulty in obtaining shipping space to the United Kingdom increased as the season advanced, until early in November the Board had an accumulation of 43,510 cases of eggs in cold stores awaiting shipment. Most of these were shipped before packing ceased on 31st December, at which date 19,000 cases remained in cold storage. Shipping space for 14,000 cases was secured in February, and the balance was pulped on behalf of the Department of Commerce, and later shipped to the United Kingdom on account of the British Ministry of Food.

Drying.—In January, 1942, arrangements were completed by the Commonwealth Government for the erection of an egg-drying plant in Queensland to absorb future surplus supplies which, because of lack of refrigerated shipping space, it might not be possible to ship, either as eggs-in-shell or liquid frozen egg.

The Queensland Government was requested to undertake the drying of eggs on behalf of the Commonwealth Government, and the State Government agreed to the Board's acting as its agent for this purpose. The actual costs involved in the erection of the building and the installation of the drying plant are to be borne on the following basis:—(*a*) The Board to provide the necessary land; (*b*) the Board and the Commonwealth Government to share equally the cost of erection of the building; and (*c*) the Commonwealth Government to supply and install the drying plant. The State Government has agreed to guarantee the Board's account at the Commonwealth Bank for the capital sum involved in the erection of the building.

Building operations commenced towards the end of May and proceeded satisfactorily for a time, but progress has been delayed because of difficulty in obtaining fabricated steel.

FRUIT MARKETING.

I.—Apple and Pear Marketing Board.

Apples and pears throughout Australia were again acquired by the Commonwealth Government under the National Security Act. In accordance with the recommendations of a Parliamentary Joint Committee appointed by the Commonwealth Government to report upon the Apple and Pear Acquisition Scheme, certain alterations were made in the constitution of the Australian Apple and Pear Marketing Board and the State Committees. The old Board, consisting of nine members, was replaced by a Board of three, with executive powers, and an Advisory Council was set up consisting of six members—the Chairman of each of the State Committees. The reconstituted State Committees consist of the following members:—(*a*) Four representatives elected by registered growers; (*b*) an agent nominated by the Agents' Association; (*c*) an officer of the Department of Agriculture; and (*d*) an additional member nominated by the State Government to represent consumers.

Except for minor amendments and regrouping of the varieties of apples and pears the acquisition scheme for the 1942 season was on the same general lines as the scheme which operated in the preceding year.

During the first six months of 1942 the Queensland Committee sold 341,036 cases of apples and 82,095 cases of pears. The apples sold comprised 91,135 cases from Queensland growers and 249,901 cases from other States; whilst of the pears sold, 8,660 cases were Queensland grown and 73,435 cases came from other States.

During the calendar year 1941 apple and pear sales in Queensland under the acquisition scheme were as follows:—

Origin of Fruit.	Apples.	Pears.
	Cases.	Cases.
Queensland	239,127	18,871
New South Wales	36,166	41,713
Victoria	301,793	119,001
Tasmania	251,545	15,757
South Australia	10,624	762
Western Australia	20,346	..
	859,601	196,104

2.—The Committee of Direction of Fruit Marketing.

The Committee of Direction of Fruit Marketing, comprising growers' representatives elected by each of the Sectional Group Committees provided for under the Act for Pineapples, Bananas, Citrus, Deciduous and "Other Fruits," with the Director of Marketing as Government Representative, has been established under *The Fruit Marketing Organisation Acts, 1923 to 1940.*

The organisation is empowered to function until 31st December, 1944.

PINEAPPLE SECTION.

Production totalled 1,383,495 (1⅛-bushel) cases—a decrease of 73,189 cases. Because of labour difficulties and fertilizer rationing, it is anticipated that pineapple production will show a further decline in the coming season.

Canneries.—The extent to which the industry is dependent upon a factory outlet is indicated by the fact that canners handled 48 per cent. of the total crop. During the peak weeks of the summer crop, factories handled over 70 per cent. of the total loadings. Quantities processed for the two packs were as follows:—Winter pack of 1941, 316,406 cases; summer pack of 1942, 350,903 cases; total, 667,309 cases.

Because of rapid ripening of fruit and a shortage of experienced female labour, factories were unable to handle all pineapples offering during the peak weeks of the 1942 summer crop. This resulted in an overloading of the Queensland and Interstate fresh fruit markets, with low returns to growers. Except for this period, however, cannery requirements were greater than deliveries.

Factory Price to Growers.—To meet growers' increasing production costs, the price for the winter crop, 1941, was raised to £9 1s. 8d. per ton f.o.r. growers' station—an increase of 10s. per ton on the price paid for the previous summer crop. Efforts to obtain a further increase of 10s. per ton for the 1942 summer crop were nullified, because of a misunderstanding in regard to price-pegging.

A reserve fund to supplement the grant from the Fruit Industry Sugar Concession Committee to meet losses on export and other contingencies due to war conditions was again established by a levy of 10s. per ton on the winter crop, and 5s. per ton on the summer pack. It was not necessary to use the levy collected on the summer crop, and the amount will be refunded to growers in full. The levy of 1s. 8d. per ton for advertising was continued, and these deductions, together with 10s. per ton cannery purchase revolving fund, made the first payment to growers for the two crops as follows:—winter crop, 1941, £8 per ton; summer crop, 1942, £8 5s. per ton.

F.I.S.C.C. Grant.—This Committee's grant to subsidise export losses for 1941 was made on a different basis from previous years, as the Committee's grant of a maximum of £5,000 carried the condition that export losses be shared by the Committee and the C.O.D. on a £ for £ basis. Finality has not yet been reached in regard to export costs for 1941, and the Pineapple Committee decided to rebate 3s. per ton to growers from the funds available. A further rebate will be possible when the grant from the F.I.S.C.C. is received.

Department of Supply Orders.—As the substantial requirements of this Department received priority, the ordinary markets were short supplied. Sales under this heading were:—

> Canned pineapple—winter pack (1941), 44,626 dozen; summer pack (1942), 117,315 dozen. Fruit salad—winter pack (1941), 13,113 dozen; summer pack (1942), 65,606 dozen.

Pineapple Juice.—Prior to the commencement of the summer pack 1942, National Security Regulations were gazetted prohibiting the packing of juice in cans. Advice was received that pineapple juice could be packed only for Defence orders, but as no such orders were received the juice was wasted. When the summer pack was almost completed, the Department advised that all juice that could be packed was required. Packing commenced immediately, but there was a very heavy loss in the meantime.

Queensland Canneries Pty. Ltd.—The profit for the financial year, 1940-41, amounted to £9,287 17s. 2d., of which the half share available for distribution to growers was £4,643 18s. 7d. This was an improvement on the amount available for the previous year, due mainly to the fact that Queensland Canneries Pty. Ltd. handled approximately 1,000 tons more fruit in 1940-41 than in 1939-40.

Profits earned in 1940-41 enabled the distribution of dividends to growers at the rate of 5s. per ton, as compared with 3s. 7.85d. per ton for the previous year.

As the trial three-year period of the cannery link-up agreement ended in 1941, the agreement was reviewed in conference with the Minister for Agriculture and some modifications made to safeguard both parties. A new agreement, with provision for reviews at five-year periods, was submitted to a vote of all growers who had supplied factory pineapples during the calendar year 1941. The result of the vote was 95.9 per cent. in favour.

BANANA SECTION.

Weather conditions caused extreme fluctuations in deliveries during the year. From a period of very heavy supply early in the year, necessitating extensive advertising in an endeavour to hold prices above unprofitable levels, production dropped rapidly and the year closed with record prices in Brisbane. Production for 1941-42 was approximately 450,000 1½-bushel cases, compared with 550,338 for the previous year.

Both the wholesale case and bunch floors had an excellent year. Comparative figures:—

—	1940–41.		1941–42.	
	Number.	Value.	Number.	Value.
		£		£
Bunches	91,336	10,494	105,632	14,950
Cases	87,924	48,967	94,306	64,844
	..	£59,461	..	£79,794

In December, 1941, a bonus of 20 per cent. of commissions charged to growers supplying the floors in 1940-41 was paid. The amount distributed was £825.

CITRUS SECTION.

Factory Operations.—Factories handled all citrus fruits offering with the exception of Lisbon lemons, the heavy crop of this fruit necessitating limitation of deliveries. A collapse in the southern factory price of lemons affected detrimentally the Queensland peel position.

Comparative figures:—

	1940. Tons.	1941. Tons.
Lisbon lemons..	219¼	213
Seville oranges	90	72¾
Juice oranges	169¼	133¾
Citrons	22¼	14¾
Grapefruit	16¾	15¼

Fruit Fly Lure.—The C.O.D. was given the opportunity to acquire the Robinson Lure, developed in the Gayndah district, and favourably reported on by the Department of Agriculture and Stock. The Citrus, Other Fruits, and Deciduous Sectional Group Committees combined in the purchase of the formula which was subsequently published in the press. Unfortunately, because of war conditions, difficulty has been experienced in obtaining supplies of orris root, one of the ingredients of the lure.

OTHER FRUITS SECTION.

Factories required all fruit available of each of the varieties of "other fruits." With the exception of papaws and passionfruit, quantities handled were not as great as in the previous year. Adverse weather affected the fig, strawberry, and metropolitan tomato crops.

	1940–41. Tons.	1941–42. Tons.
Papaws..	573¼	1,125
Passionfruit	47¼	90¼
Metropolitan tomatoes	196¼	100¾
Strawberries	198¼	163
Figs	114¼	104¾

Papaws.—Concentration on the production of fruit salad, for which there were heavy Interstate and Army Canteen orders, brought about the large increase in the ripe papaw tonnage. Tropical fruit salad has become very popular in the Southern States, where sales are increasing. Green papaws for condiments are also in increasing demand.

Passionfruit.—Most of the fruit handled by factories was obtained on the market, and consisted mainly of New South Wales consignments. Queensland production has decreased each year since 1939. Difficulty in controlling disease has reduced acreage or caused cessation of production.

Strawberries.—Although growers planted an increased acreage, drought reduced the crop. Interstate railings were lighter, and market prices generally higher. The factory price increased by ½d. per lb., making the price for jam quality 6d. and canning 7d. Factories required over 300 tons, but only 163 tons were delivered.

Figs.—Growers' estimates at an early stage of the crop indicated a record, but adverse weather and pest damage curtailed the tonnage harvested. The levy of 5s. per ton for advertising was continued, but because of light deliveries advertising was not necessary. The factory price increased by ½d., making the price 2d. per lb.

Tomatoes.—Redland growers were again represented on the Sydney market. The Minister again made available for this work the services of the Instructor in Fruit Packing. Drought caused a considerable decrease in Interstate consignments. High prices reduced the quantity handled by factories.

Pegging of Tomato Prices.—When the maximum price for tomatoes was pegged at 8s. per case at grower's gate, representations made by the Department of Agriculture and Stock and the C.O.D. to the Prices Commissioner resulted in more favourable terms of 4d. per lb. After further representations by the C.O.D. the maximum price was raised to 6d per lb. at grower's gate. Price pegging of tomatoes was subsequently cancelled.

Development of Canned Products.—Service tests arranged by the Director of Victualling proved that papaws canned in pineapple juice are suitable for Army requirements, and orders already received will tax the capacity of the papaw industry.

BEAN SECTION.

A successful conference of bean growers was held in Gympie in October, 1941, and the growers' bean sub-committee met on several occasions during the year. The seed—107 bushels—produced under the bean seed certification scheme was sold through the C.O.D. A bean canvassing agreement was again negotiated between the New South Wales Chamber of Fruit and Vegetable Industries and the C.O.D. on behalf of Queensland coastal bean growers to prohibit canvassing during the harvesting period. The agreement operated from the 2nd May.

Bean Canning Scheme.—Late in 1941, through the Federal Department of Supply and Development and the Queensland Canneries, a move was instituted for the production of green beans for canning for the fighting forces. It was recommended at a conference of representatives from all bean districts, which was attended by the vegetable expert of the Department of Supply, that growers concentrate on the Epicure variety, the only recommended variety of which seed was available. All supplies of Epicure seed available in Australia were procured, and growers were assisted with credit for wire, seed, fertilizers, and spraying materials. It was planned to produce Epicures early and late in the year for canning and dwarf varieties in the winter for market and canning.

The Epicure production plan was defeated by the ravages of the bean fly, and disappointing deliveries were made of the dwarf varieties. The bean sub-committee, recognising the urgency of the requirements of the fighting forces, recommended the adoption by the Department of Supply of a scheme for the compulsory diversion of 10 per cent. of the bean crop to canneries. This was accepted, but had not become effective by the end of June.

DECIDUOUS SECTION.

Production was not as heavy as in the previous seasons. Both pome and stone fruit crops were light. There was a good crop of grapes. The light crops were to some extent offset by a marked absence of disease. Dry spring conditions and a shortage of labour seriously affected vegetable production. Consignments to various markets, as compared with the previous year, were:—

—	1940–41.	1941–42.
	Tons.	Tons.
Brisbane, including factory	14,664	13,178
New South Wales	1,913	1,666
North Queensland	1,314	775
	17,891	15,619

Management of Apple and Pear Board Floor.—The C.O.D., at the request of the Australian Apple and Pear Marketing Board, has managed Board selling floors in both the Municipal and Turbot Street markets. This has effected a considerable saving in man-power, as the C.O.D. has run the floors without staff additions, and obviated the employment of a large staff by the Board.

Factory Operations.—The total of all Stanthorpe fruit handled by factories was 539¾ tons, as compared with 633½ tons the previous year. Because of a light crop, and market rates above average, only 161¾ tons of plums were received for processing, as compared with 352 tons for the 1940/41 crop. Factories handled more apples, taking 258¼ tons as compared with 169 tons during the previous season. Prior to the planting period, growers were advised of a factory requirement of over 500 tons of canning and sauce tomatoes. The price for canning was fixed at £9 net to growers, and the net price for sauce quality was increased by £1 per ton to £7. However, because of labour shortage, in addition to unfavourable growing conditions, the crop was below normal. Only 109½ tons were supplied to factories.

GENERAL.

Sydney Branch.—During the year there was a further substantial development in the wholesale side of the Sydney Branch. Over 88,000 packages of vegetables were handled on the large C.O.D. floor in the vegetable markets. The follow-

ing schedule indicates the importance of the C.O.D. wholesale floors in Sydney, their expansion and value to the Queensland fruit industry:—

—	Packages.	Turnover.
		£
1937	132,294	62,629
1938	185,325	82,959
1939	243,576	105,943
1940	241,125	110,152
1941	292,162	123,082
1942	345,296	190,816

The Branch broke all previous records by selling on consignment 100,721 cases of pineapples, or 36.8 per cent. of the Queensland pines sold in Sydney.

Brisbane Wholesale Fruit and Vegetable Floors.—Progress on these floors matched that of the Sydney Branch. Turnover increased from £94,881 in 1940/41 to £146,990 in 1941/42.

Rockhampton Branch.—Despite staff losses to the Services, this Branch maintained turnover. A large wholesale floor, two retail establishments, and banana ripening rooms are operated.

Mackay Branch.—Mackay, the most recently established of the C.O.D. Branches, was seriously affected by the call-up to the Services of all its male members, except the manager. Despite depleted staff valuable assistance was given to the potato campaign, involving the handling and distributing of all seed potatoes used in the Mackay district. At the close of the year the C.O.D., faced with staff adjustments through the call-up to the Services of 33 male members of its Queensland staff, reluctantly decided to close the Branch to free the manager for more important work.

Townsville Branch.—This Branch had a record year, and the staff responded magnificently to the call for assistance in the war effort. For the last quarter of the year it held a large Army vegetable contract, which it fulfilled under most trying conditions to the complete satisfaction of the Army authorities.

Bonus Distribution.—Satisfactory trading for 1940/41 enabled the Committee to again make a 10 per cent. bonus distribution on commissions to suppliers to the C.O.D. selling floors in Sydney, Brisbane, Rockhampton, Mackay, and Townsville. On the Sydney section, the bonus was also paid on the receiving and delivering charge of 1d. per package. Distribution of the bonus of £1,868 was made in November, 1941.

Country Fruit and Vegetable Distribution Scheme.—Late in the year it was found necessary to suspend temporarily the scheme under which half-bushel cases of fruit, vegetables, mixed fruit, mixed vegetables, and mixed fruit and vegetables have been distributed through the Railway Department to consumers in the far distant country centres. The operation of this scheme, established on the initiative of the Minister for Agriculture and Stock in 1935, supplied the requirements of people in country districts who had found considerable difficulty in obtaining good quality fruit and vegetables at reasonable prices.

Merchandise Department.—Despite increased trading difficulties, gross turnover showed a slight increase to £71,264 from £70,596 in the previous year. In November, 1941, a bonus of 2½ per cent., amounting to £1,167, was paid to growers on purchases made the previous year.

Army Buying.—Early in 1942, to conform with an alteration in Army rationing, fruit was deleted from the menu, and tenders were called by the Department of Supply and Development for the supply of fruit to canteens over a three-month period. The C.O.D. submitted a proposal to purchase canteen requirements at ruling market rates on a very small commission basis, and was later requested by the Department of Supply to purchase Army requirements of vegetables on a basis similar to the proposal submitted in respect to canteen fruit. The C.O.D. agreed, and on 1st May commenced supplying all Queensland camps not covered by contracts. Potatoes, onions, swedes, and pumpkins were not covered by this arrangement. During May and June the supply of a number of camps covered by contracts was taken over by the C.O.D. This work has thrown a heavy additional burden on a very depleted staff, but the response has been excellent. The scheme was on trial to the end of June.

Contract Vegetables.—The Department of Supply and Development, with the co-operation of the State Departments of Agriculture, inaugurated a scheme for the production of vegetables under contract for delivery to the Army. The Department of Supply arranged for the C.O.D. to handle distribution, and this work has been carried out smoothly.

Seed.—Australia is facing an acute vegetable seed shortage. The Seeds Committee in Canberra appointed the C.O.D. sole distributor in Queensland of seeds to contract vegetable growers.

Canvassing Agreements.—Each year negotiations are conducted with the N.S.W. Chamber of Fruit and Vegetable Industries for the restriction of canvassing of growers by agents or their representatives for supplies. Agreements which have resulted have proved beneficial alike to growers and agents.

Agreements which operated during the year covered Bowen tomatoes, South Queensland beans, Redlands tomatoes, and Granite Belt fruit and vegetables.

Directions.

The following fruits have been under the control of the Committee of Direction for the year ended 30th June, 1942, by direction:—

(*a*) *For Factory Purposes.*—Citrus, deciduous, figs, passion-fruit, papaws, pineapples, strawberries, and tomatoes.

(*b*) *For Market Stabilisation Purposes.*—The marketing of Stanthorpe-grown tomatoes was controlled by prohibiting the sale of "B" grade and small "A" grade tomatoes from such district when the price of "A" grade did not realise a higher gross amount than 4s. 6d. per half-bushel case.

Levies.

The following levies have been in operation during the year ended 30th June, 1942:—

Banana Levy.—1d. for every £1 or part thereof of the gross proceeds realised from sales in Queensland of bunch bananas and ½d. per 1½-bushel case of bananas.

Citrus Levy.—½d. per case (irrespective of size), to be expended in the interests of the citrus section.

Pineapple Levy.—(*a*) Fresh Fruit: Until the 24th August, the levies were 2d. per case on Smooths, and ½d. per case on Rough and Ripley varieties. From the 24th August the levy on Smooths was reduced to 1d. per case, the monies collected being for advertising, administrative, and stabilisation purposes. (*b*) Cannery Revolving Fund: Levy 10s. per ton, or 3d. per case on factory fruit only, for the purchase of half-interest in Queensland Canneries. On completion of purchase the fund will revolve and the levy will be returned to growers in the order of their contributions.

Stanthorpe Levy.—3s. 4d. per ton on all fruit and vegetables marketed from the Stanthorpe district, the fund so created to be used for administrative purposes.

Hail Insurance Levy.—6s. 8d. per ton on fruit only grown in the northern portion of the Granite Belt, being the contributions of the growers concerned to a hail insurance fund.

Papaw Levy.—At the rate of 1d. for every two cases or part thereof, half the fund so created (with a minimum of £125 and a maximum of £175 per annum) to be used to subsidise the appointment by the Department of Agriculture of a papaw research officer; the balance of the funds to be used for advertising purposes.

Tomato Levy.—½d. per case, but no levy on consignments of less than four cases, to be used for administrative purposes.

Fig Levy.—5s. per ton on factory figs, the fund created to be used for advertising purposes.

Avocado Levy.—1d. per case, gazetted 15th July, 1941, the funds to be expended in advertising.

Refunds made to Growers under Various Systems of Finance during the Period of Twelve Months ended 30th June, 1942.

Pineapple Funds.

(*a*) *Interstate Freight Rebate.*—A rebate of ¾d. per case was made on all interstate consignments for the year ended 30th June, 1941. This was distributed in December, 1941, and absorbed £1,374 17s. 6d.

(*b*) *Cannery Consignors.*—A refund at the rate of 4s. 6d. per ton was made in June, 1942, on the basis of supplies to factories for the year ended 31st December, 1941. This refund amounted to £3,579 1s. 9d.

(*c*) *Stabilisation Fund.*—A refund of 3s. per ton on supplies to factories for the year ended 31st December, 1941, was made in June, 1942, and amounted to £2,386 1s. 3d.

(*d*) *Cannery Profits.*—The half-share of the Cannery profits for the year ended 30th June, 1941, amounted to £4,643 18s. 7d. This enabled a distribution of 5s. 2d. per ton, and the amount so distributed in October, 1941, was £4,618 9s. 6d., based on supplies to the Canneries for the financial year ended 30th June, 1941.

Marketing Report.

Summary of refunds to pineapple-growers during the year ended 30th June, 1942:—

	£
(*a*) Interstate Freight Rebate	1,374
(*b*) Cannery Freight and Handling Reserve	3,579
(*c*) Cannery Stabilisation Fund	2,386
(*d*) Cannery Profits	4,618
	£11,957

FREIGHT REBATES OTHER THAN PINEAPPLE.

(i.) *Citrus.*—£162 was rebated on interstate consignments for the year ended 30th June, 1941, at the rate of 1d. per case.

(ii.) *Deciduous.*—A rebate of 10s. per ton was distributed to growers consigning interstate and to C.O.D. branches in Townsville and Rockhampton; £1,218 was thus rebated to growers.

(iii.) *Bowen.*—A rebate of 1d. per case (all sizes) was paid on consignments on the C.O.D. train to the Brisbane and interstate markets for the 1941 season. This rebate amounted to £525.

STANTHORPE CO-OPERATIVE HAIL COMPENSATION FUND.

The damage, on which compensation was payable, was assessed at 64,761.03 bushels, and an interim payment of 1s. per bushel was made in May. Compensation paid to the 30th June amounted to £3,238 1s. 8d.

During the year 1936-37 the Queensland Government approved of a grant of £2,000 to the fund, to be applied in annual payments of £400 for five years. The five-year period expired in 1940-41, when the final payment of £400 was made.

SUMMARY OF MONEYS RETURNED TO GROWERS DURING 1941-42.

	£	£
Pineapple growers		11,957
Freights—		
Citrus	162	
Deciduous	1,218	
Bowen	525	
		1,905
Fruit Sections		2,693
Merchandise		1,167
Hail Payments		3,238
		£20,960

FACTORY ACTIVITIES FOR TWELVE MONTHS ENDED 30TH JUNE, 1942.

The following quantities of the various fruits have been handled for factory:—Stanthorpe fruits, 539¾ tons; citrus fruits, 450¼ tons; figs, 104½ tons; papaws, 1,125 tons; passionfruit, 90¼ tons; metropolitan tomatoes, 100½ tons; strawberries, 163 tons; and pineapples—

Winter crop, 1941—7,425 tons supplied direct, plus 484 tons ex market	7,909
Summer crop, 1942—8,711 tons supplied direct, plus 62 tons ex market	8,773

making a grand total of all factory fruits 19,255¼ tons.

INTERSTATE TRANSPORT.

Loadings interstate declined as shown by the following:—

	1940-41. Packages.	1941-42. Packages.
To—		
Victoria	402,320	328,780
New South Wales	1,282,735	1,074,383
	1,685,055	1,403,163

Strawberry Consignments interstate by passenger train during 1941-42 were:—

	Pint Boxes.
To—	
Victoria	11,600
New South Wales	431,826
	443,426

3.—SECOND-HAND FRUIT CASES ACT.

The Act is an emergency measure designed to preserve for re-use by fruit growers, as an offset against the shortage of timber and nails for new cases, those cases in which fruit has been marketed and which are still in good condition. Provision is made for the re-sale of the cases to growers through dealers licensed by the Committee charged with the administration of the Act.

It is provided that the Act shall continue in force for the duration of the war and for such period thereafter as Parliament shall from time to time by resolution determine.

Of the twenty licences held by dealers as at 1st July, 1941, seven were either surrendered or lapsed during the year. Five licences were issued to new dealers. Sales totalled 679,832 cases of all kinds, on which the levy payable by dealers at the rate of 3d. per dozen or part thereof amounted to £709 1s. 6d. Of the cases sold, 651,564 were disposed of to fruitgrowers and 28,268 to others.

HONEY BOARD.

The Board is empowered to function to 8th March, 1944.

Adverse seasonal conditions were responsible for a small honey flow in the twelve months ended 30th June, 1942, during which the Board's selling agents disposed of 7,600 (60lb.) tins of honey and 19,337¼lb. of beeswax compared with 24,705 tins of honey and 23,480¼lb. of beeswax in 1940-41.

The maximum and minimum prices realised by the Board's agents for honey during the period under review were 6½d. and 2d. per lb. respectively, while prices for beeswax ranged from 1s. 8d. to 2s. 6d. per lb.

NORTHERN PIG BOARD.

The Board is empowered to function to 31st December, 1946.

During the year the Board handled 14,283 pigs of a total dressed weight of 1,510,522 lb. Of this total 13,722 pigs, weighing 1,478,158 lb., were sold to the North Queensland Co-operative Bacon Association Limited, and 526, weighing approximately 27,373 lb., to local butchers. This includes the measured weight of 251 porkers and the estimated weight of 275 suckers, weaners, and stores on the basis of 15 lb., 20 lb., and 50 lb. per carcase respectively. The balance of 35 represents pigs lost in transit.

Sales realised £34,372 10s. 3d., and equalisation charges amounting to £927 19s. 5d. were collected from butchers at the rate of ½d. per lb. on the dressed weight of pigs purchased by them direct from growers. The average price paid for first-grade baconer pigs was 5.8d. per pound.

PEANUT BOARD.

The Board is empowered to function to 27th August, 1947.

1940 *Season.*—This season's transactions have been finalised. The total net payments to growers for the 4,986 tons delivered to No. 1 Pool, excluding the ½d. lb. levy, averaged 2.589d. per lb. for all grades and varieties. The selling prices and administrative expenses in respect to No. 1 Pool averaged 3.679d. and ·955d. per lb. respectively.

On the receivals in No. 2 Pool—536 tons—the total net payments to growers, excluding the ½d. lb. levy, averaged 2.575d. per lb. for all varieties. The selling price averaged 3.557d. per lb., and the administrative expenses .851d. per lb.

1941 *Season.*—The intake, which was below Australian requirements, amounted to:—

—	Virginia Bunch.	Spanish, Valencia, and Valroy.
	Tons.	Tons.
No. 1 Pool	3,411	2,015
No. 2 Pool	451	112
	3,862	2,127

To alleviate the shortage, the Board, in the latter half of 1941, endeavoured to obtain supplies from India, but, owing to the spread of the war to the Pacific, the Commonwealth Government's authority for the importation of the quantity approved, was withdrawn.

No. 1 Pool has been finalised, the average selling price being 3.871d. per lb. The total net payments to growers, excluding the ½d. lb. levy, averaged 2.764d. per lb. for all grades and varieties. The administrative expenses averaged .974d. per lb.

The total net payments per lb. to growers on deliveries to No. 2 Pool, finalisation of which is imminent, will be equivalent to those paid, according to grade and variety, on peanuts received in No. 1 Pool.

1942 *Season.*—No. 1 Pool quotas allotted to growers totalled 6,000 tons of Virginia Bunch and 3,300 tons of Spanish and other varieties, compared with 4,240½ and 2,725 tons respectively, for the previous season. To 30th June, the Board has received:—

—	No. 1 Pool.	No. 2 Pool.
	Tons.	Tons.
Virginia Bunch	788	31
Spanish, Valencia, and Valroy	403½	5
	1,191½	36

It is estimated that a further 4,000 tons will be delivered to the Board before the end of the intake season.

The industry's inability to produce the tonnage allotted for this season may be attributed to adverse seasonal conditions, which also affected the quality of the crop, necessitating an alteration in the grade standards prescribed under "The Peanut Industry Protection and Preservation Acts, 1939 to 1941," for Virginia Bunch peanuts in shell.

To date, a first advance at the average rates of 1.994d. per lb. on Virginia Bunch and 1.625d. on all other varieties has been paid on receivals in No. 1 Pool. The No. 2 Pool first advance was at the flat rate of ½d. per lb. on all varieties.

The demand throughout the Commonwealth for peanuts has reached abnormal proportions owing to the needs of the Australian and Allied Armed Forces, an increasing civilian consumption, and the shortage as a result of war conditions of confectionery and other types of nuts.

Because of the small volume of the 1942 crop, the Board is not in a position to cater for requirements, as a consequence of which the Board's sales figures for the calendar year 1942 will be below those for its seventh successive record selling year, 1941, when the Board disposed of more than £260,000 worth of peanuts.

THE PLYWOOD AND VENEER BOARDS (NORTHERN AND SOUTHERN).

Both Boards are empowered to function until 2nd May, 1947.

Co-operation with the plywood manufacturers in New South Wales and Victoria has been maintained, and has greatly assisted orderly marketing throughout all States.

Deliveries of controlled plywood for the year on the basis of 3/16in. totalled 71,608,360 square feet, valued at £584,800, comprising 54,446,080 square feet, valued at £446,642, delivered to the Southern Board; and 17,162,280 square feet valued at £140,158, delivered to the Northern Board.

The reduction in output of approximately 6½ million square feet, as compared with the deliveries for the previous year, reflects the increased calls made for defence works upon the man-power, and transport facilities normally available for log haulage, and other services.

Sales were distributed as follows:—

—	Southern Board.	Northern Board.
Queensland	8,980,825	889,360
Interstate	43,857,225	13,498,170
Overseas	1,608,030	2,774,750
	54,446,080	17,162,280

The aggregate sales of both Boards show increases of 1,365,978 square feet to Queensland buyers and 6,420,506 square feet to interstate buyers, while sales to overseas buyers decreased to the extent of 14,241,767 square feet.

The diversion of sales to the Australian market and the falling-off in overseas sales have been due largely to the growing demand for plywood for defence purposes as well as to the loss of certain overseas markets and shipping difficulties.

The administrative levy throughout the year was on the basis of 1d. per 100 square feet, calculated on the equivalent of 3/16in. thickness. Cost of administration averaged .865 pence and quantity discount to Queensland distributors .179 pence, making a total of 1.044 pence per 100 square feet.

WHEAT INDUSTRY.

The Queensland State Wheat Board, established under "*The Wheat Pool Acts, 1920 to 1930*," has continued to act on a commission basis as sole licensed receiver and agent in Queensland for the Australian Wheat Board, which controlled the marketing of wheat in terms of the *Wheat Acquisition Regulations* issued by the Commonwealth Government in September, 1939, under *The National Security Act*. Queensland's system of wheat classification, whereby the higher grades of wheat command premiums over the basic price, remained undisturbed, and the premiums were collected by the Queensland Board and returned to the growers. Deductions from amounts payable to growers of contributions for the Queensland Wheat Growers' Co-operative Hail Insurance Scheme have also been made to ensure continuance of the scheme.

1940-41 *Season* (No. 4 Pool).—Total receivals by the Australian Board amounted to 63,657,850 bushels, of which Queensland deliveries comprised 5,286,538 bushels. Advances paid by the Australian Wheat Board for bagged wheat total 3s. 10d. per bushel, less rail freight. In Queensland the net payment amounts to 3s. 5d. for first quality milling wheat. In addition, the Queensland Wheat Board has made a distribution to growers, of quality premiums and profits, at the rates of 4½d. per bushel for Q1, 3d. for Q2, and 1½d. for Q2A and feed wheat, less ½d. per bushel retained as hail insurance levy. Details of classifications and payments are as follows:—

Classification.	Deliveries.	Percentage.	Payments.
	Bushels.		
Milling—			
Q. 1	4,625,335	87·50	3s. 9½d.
Q. 2	477,974	9·04	3s. 8d.
Q. 2A	167,461	3·16	3s. 6½d.
Feed	15,768	·30	3s. 2½d.
	5,286,538	100·00	..

Compensation paid to growers from the hail insurance fund amounted to £1,838 7s. 11d.

Commonwealth Grant.—Distribution from the grant allocated to Queensland under "*The States Grants (Drought Relief) Act, 1940*," amongst wheat growers eligible for assistance was made on behalf of the Queensland Government by the State Wheat Board. The plan of distribution approved by the Commonwealth Government provided for payments to growers whose crops failed, at the rate of 10d. for each unit by which the yield was less than the equivalent of nine bushels per acre, and also payments of 2s. per acre for land prepared for planting but not planted owing to drought conditions. The equivalent yield estimated to have been obtained from crops fed off to stock or by reason of hail compensation or fire insurance was deducted from amounts to be distributed.

Of the amount of £20,000 allocated to Queensland, £14,538 11s. 7d. was expended in payments to the 635 growers who participated in the distribution.

1941-42 Season (No. 5 Pool).—Unfavourable weather conditions brought about a partial failure of the Queensland crop, and receivals by the Queensland Board as at 30th June, 1942, amounted to only 2,671,602 bushels, of which slightly more than 80 per cent. was classified as Q1. Apart from ·35 per cent. of feed wheat, the deliveries have been classified as of milling quality. Production in the other States, however, resulted in the Australian deliveries totalling 153,416,592 bushels.

The short Queensland crop necessitated the importation of large quantities of wheat from New South Wales to meet the requirements of Queensland millers and for stock-feeding purposes. With the assistance of the Minister for Agriculture and Stock, whose personal representations in Canberra secured adequate supplies of bagged wheat at a satisfactory price, arrangements were made for milling and produce trade requirements to be imported through the Queensland Board as agent for the Australian Board. Some 2¾ million bushels have been imported to date, and orders yet to be supplied will bring the total importations for the season to approximately 3,000,000 bushels.

A first advance has been distributed on all milling quality wheat at the rate of 3s. per bushel for bagged wheat, less rail freight, which for Queensland growers is the equivalent of a net payment of 2s. 7d. per bushel. On feed wheat, the advance is less a dockage of 4d., making the amount distributed in Queensland 2s. 3d. per bushel.

Wheat for Stock Feeding.—The Board has been assisted by the Poultry Farmers' Co-operative Society, Ltd., which was appointed for that purpose, to distribute feed wheat which the Commonwealth Government has purchased from the Australian Wheat Board and has made available to bona fide feeders of stock at a price of 6d. below the normal market price with the object of stimulating production of pig meats, poultry, and eggs. While the concession has been of assistance, the local stock feeder is still handicapped because of the freight incurred in bringing the wheat from New South Wales. Prices under the scheme have been on the basis of 4s. 3d. f.o.r. Brisbane, as compared with 3s. 6d. f.o.r. Sydney.

Flour Tax.—There has been no variation in the rate of tax during the year, which remains at £2 8s. 10d. per ton. The f.o.r. price of flour at Brisbane also remained unaltered at £12 12s. 6d. per ton.

Wheat Sacks.—Arrangements have been made by the Queensland Wheat Board with the Australian Board for a sufficient supply.

Seed Wheat.—The benefits of the Necessitous Growers' Seed Wheat Scheme were again extended to growers, and the Queensland Government guaranteed payment, as in previous years, to an amount not exceeding £5,000.

Wheat Industry Stabilisation.—The Wheat Industry Stabilisation Scheme, instituted by the Commonwealth Government under "*The National Security Act*," which commenced operations with the 1941-42 season, was administered in Queensland by the State Wheat Board, subject to the supervision of the Director of Marketing, who also acts as the authorised officer in this State for the Wheat Industry Stabilisation Board. The scheme was based upon a guaranteed price of 3s. 10d. per bushel f.o.b. ports for a maximum yield of marketable wheat of 140,000,000 bushels, the equivalent of a total crop of 160,000,000 bushels. Wheat farms were required to be registered and growers licensed on a basic area equivalent to the average area planted during a priod of four years ended with the 1940-41 season.

Wheat deliveries for the first year of operation to 30th June, 1942, exceeded the fixed maximum yield by approximately 13,500,000 bushels. As a consequence, the guaranteed price may be reduced to approximately 3s. 6d. per bushel.

The partial failure of the Queensland crop, and the reduction of the guaranteed price resulting from the excess deliveries over 140,000,000 bushels, serve to emphasise the difference in circumstances which exists as between Queensland and the larger wheat-producing States.

GENERAL.

The activity of the Marketing Branch during the year has included attention to duties associated with various agricultural war-time measures and marketing schemes, including action for which organisations have been set up by the Commonwealth Government under *The National Security Act*, e.g., Emergency Supplies of Essential Commodities Scheme, Wheat and Barley Acquisition, Wheat Industry Stabilisation, and the Australian Apple and Pear Marketing Scheme.

Consequent upon the receipt by the Governor in Council of petitions from the requisite numbers of growers, notices were gazetted during the period under review, indicating intention to extend the operations of *The Primary Producers' Organisation and Marketing Acts* to ginger and North Queensland eggs. The proposal relating to ginger was accepted by the growers without opposition, and consequently a referendum on the question was not necessary. Following on an election held in July, 1942, a Ginger Board was constituted, comprising three growers' representatives and the the Director of Marketing, to control the marketing of ginger grown in Queensland.

A counter petition was received in relation to the proposal for the extension of the Acts to North Queensland eggs, and at the resultant referendum 81 votes were cast in favour of the proposal and 66 votes against. As the requisite three-fifths majority of the votes were not in favour, the proposal was rejected.

H. S. HUNTER,
Director of Marketing.

"THE PRIMARY PRODUCERS' COOPERATIVE ASSOCIATIONS ACTS, 1923 TO 1934."

The Buderim Ginger Growers Co-operative Association Limited was the only new association to be registered during the year, bringing total registrations to 212 associations and two federations.

As the registry of 20 associations has been cancelled during the period the Acts have been in force, 192 associations and two federations remain on the register.

By the issue of licenses to four persons the total number of licenses to act as auditors has been increased to 236.

Early in May the Council of Public Safety issued an order, in terms of Regulation 24 under the Public Safety Act, authorising and directing that all directors of co-operative associations and officers holding office by election shall continue to hold office for a period of 12 months from the 30th April, 1942, without the necessity of any fresh election or nomination.

A. J. EVERIST,
Registrar.

REPORT OF THE QUEENSLAND EMERGENCY SUPPLIES COMMITTEE.

By *The National Security (Emergency Supplies) Regulations*, the Commonwealth in 1941 delegated to the States power to make rules for an emergency supplies scheme, so as to provide a sufficient supply in all parts of Australia of commodities essential to the life and health of the community in the event of any emergency arising which might cause dislocation of normal transport and trading facilities.

The costs of the scheme are shared by the Commonwealth and State in agreed proportions. The total amount paid by the State during the year amounted to £8,500 on State account and £15,500 on Commonwealth account. In addition, the Commonwealth paid considerable sums on its own account.

The Treasurer of Queensland has given guarantees to the Commonwealth Bank and to the Sugar Industry for the purpose of providing reserve stocks of emergency commodities and also makes payments within the State on behalf of the State Government and the Commonwealth Treasurer, the Commonwealth Government having arranged to refund payments made on its behalf. The Treasurer has power to make payments and give guarantees, as far as Queensland's liability and expenditure are concerned, by the Emergency Supplies Act of 1941.

The Queensland Emergency Supplies Scheme is broadly divided into four parts:—

(1) Storage in traders' premises;
(2) Certain stocks dispersed from traders' premises in coastal areas and stored inland in special storages as a safety measure;
(3) Special flour depots;
(4) Special depots containing Government-owned goods.

(1) *Storage in traders' premises*—The scheme is designed with a view to having reserves in all parts of the State to provide against any emergency, particularly dislocations of transport and temporary interruptions to production. In the coastal centres of Brisbane, Maryborough, Rockhampton, Mackay, Townsville, and Cairns reserves are stored primarily by wholesalers, and in order to obtain wider dispersals or more comprehensive reserves, certain large retailers have also been called upon to hold reserve stocks.

In other parts of the State reserves are stored in retail premises, bakers being classed as retailers in order to provide for the storage of flour.

Financial assistance, given only to suppliers, is in the form of interest-free overdrafts guaranteed by the Commonwealth and State. Many wholesale suppliers have provided their own reserve stocks and also the reserves in their retail customers' premises without financial assistance, while a large number of retailers are also financing the scheme from their own resources. There are 330 registered wholesale suppliers and 2,360 registered retail stores. Of the retail stores, approximately 800 are operating on the voluntary basis, either on their own finance or because suppliers have made sufficient goods available on credit.

The Queensland sugar industry has assisted the Emergency Supplies Scheme right throughout Australia by making reserve stocks of sugar available on credit. This credit will not be redeemed until the termination of the scheme, or until the reserve stocks are utilised. This represents a considerable national service on the part of the industry. In Queensland, the period for storage of sugar is very much shorter than in other States, and certain districts contiguous to sugar mills or refineries have been exempted.

Commonwealth Regulations prescribe all commodities essential to the life and health of the community, so that all necessary items can be controlled. The Queensland Rules at 30th June, 1942, prescribe for storage of emergency commodities for periods ranging from two (2) weeks to six (6) months according to the keeping quality of the commodity and the location.

Many difficulties are experienced in making the scheme effective. The chief are shortages of certain commodities, transport hold-ups, and the very large requirements for military purposes.

Although actual statistics are not yet available, a survey of the position indicates that 80 per cent. of the prescribed reserves are stored and are being maintained, although some temporary withdrawals from reserves have to be made from time to time on account of transport interruptions. These are usually replaced as soon as new supplies arrive. The Committee regard the position as satisfactory, considering the problems that exist, and the Commonwealth Controller of Emergency Supplies has expressed the opinion that the reserves in Queensland are much greater proportionately than those in other States.

The policing of reserve stocks is done by local supply officers, who carry out the duties without extra remuneration. These are chiefly field officers of the Department of Agriculture and Stock, where available, State school teachers, and officers of the Department of Justice.

The success of the scheme has in no small measure been due to the co-operation of traders. The insurance companies, the State Government Insurance Office, and the banks have rendered valuable assistance.

The storage of commodities in Queensland presents problems far greater than those encountered in other States, because of climatic conditions and the prevalence of pests. Nevertheless, loss of goods by deterioration has been very slight, and the amount of compensation payable by the Government has been very much smaller than was expected.

In order to assist merchants in obtaining supplies for the establishment and maintenance of reserve stocks in Queensland, the Committee and the Commonwealth Controller of Emergency Supplies arrange priority of supply and transport of goods from Southern States.

(2) *Stocks dispersed from traders' premises in coastal areas and stored inland.*—In January last certain reserve stocks and, in some instances, trading stocks not immediately required, were dispersed from traders' premises in coastal towns to premises acquired for the purpose by the Committee. These goods consist almost entirely of non-perishables, and are turned over from time to time and replaced with new goods.

The cost of transport to and from dispersed stock depots is borne by the Commonwealth unless such transport is by State railways, when the State pays half the railage. When goods are forwarded direct from the depots to traders' retail customers, a proportion of the transport costs paid by the Governments is recovered from the traders. The cost of storage and supervision is wholly borne by the State. The Governments also guarantee the traders against loss by deterioration, damage, or other causes while the goods are in transit to and from the depot and during storage.

(3) *Special flour depots.*—Because of climatic conditions and the prevalence of insect and other pests, it is difficult to store flour for long periods in Queensland. Six weeks in bakers' and retailers' premises was considered a safe limit. After the entry of Japan into the war, however, it was decided to establish additional special storages in North Queensland under direct control of the Committee. Three depots were established and a quota of flour allotted to each. This flour is supplied by the millers, who forego payment for approximately six weeks, while the flour is in the special depots. Orders for merchants' customers are filled from the depots and an equivalent amount of flour replaced in the depots by the millers; thus the flour is rotated.

The operation of the depots has been very successful, and to date deterioration has been negligible. The establishment of these depots has resulted in the provision of a three months' reserve in North Queensland. The cost of the flour to consumers has not been increased, as the Governments pay all costs over and above those costs that ordinarily would have been incurred.

(4) *Special depots containing Government-owned goods.*—The Commonwealth has purchased or is purchasing goods valued at approximately £220,000, which are being stored in buildings acquired for the purpose by the State Government. Approximately 22 depots have already been established or are being planned. The goods in these depots will provide a ration for approximately 166,000 persons for one month, except that perishable goods, such as flour, butter, fresh meat, and vegetables, are not included since they cannot be stored for long periods. The goods in these depots would, of course, be available for distribution for civilian use in an emergency, or in the case of an acute shortage of supply due to dislocation of transport, or actual shortage of production. In the meantime it is planned to keep the goods fresh, where necessary, by means of rotation by disposing of them from time to time through ordinary trade channels or for military purposes.

The Commonwealth purchases the goods and pays transport costs; the State provide storage and supervision.

Commodities Control Committees.—The National Security (Use and User of Emergency Supplies) Rules were promulgated with the object of providing the means of conserving, regulating, controlling, and adjusting the use and the user of commodities in an emergency. These Rules were proclaimed in December and can be operated as and when required.

The Queensland Commodities Control Committee administers the Rules under the direction of the Minister. There are 128 Local Commodities Control Committees which operate in districts throughout the State, but are subject to the Central Committee. If, however, any portion of the State is cut off, the local committee would have power to act in order to deal with any necessary matters provided for in the Rules.

Under the Rules, a Commodity Advisory Committee functions and investigates matters, mainly of a technical nature, referred to it by the Commodities Control Committee.

As a result of the efforts of the Commodities Control and Commodities Advisory Committees, schemes have been drawn up to ensure a supply of perishable, as well as non-perishable, commodities to Brisbane and other centres in the event of an emergency, and plans to cope with likely emergencies have been made.

W. C. OGILVIE, Secretary.

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